From Pixels to Public Health: Non-Traditional Discourse on Infant Vaccination

by

DAVA MCDANIEL

Presented to the Faculty of

The University of Texas at Austin in Fulfillment
Of the Requirements for the Degree of

Plan II Honors
Bachelor of Arts

THE UNIVERSITY OF TEXAS AT AUSTIN
April 2024

Supervisor: Zachary Elkins

Second Reader: Kathryn Tackett

"The Trusted"

An internal monologue of the self-proclaimed conspiracy theorist

There are bugs in my bed?
Hot oil from my shower head?
Water pipes filled with lead?
Too much to worry about.

Is there a bomb in my basement?
Knives beneath the pavement…
The idea of local safety, get rid of it
How could I ever know

Local dangers won't show,
to me they're hidden
Under smiling faces spitting empty words to fund
Crisp white collars collecting dollars
Silk ties tied with lies
It's charming

There are issues so prevalent
to most would seem irrelevant
As no one's ever read of it
How could they

In a world where truth is a commodity,
Bought and sold for a hefty fee,
Who can I trust, where do I turn,
The fabric of reality seems to churn

Who'd admit that they're unfit to learn of what could benefit
So to tell me I sit in the dark?
Clicking a light that was never meant to work
Fingers stumbling, searching, for an answer
Masked as a cure but spreading like cancer

Even if the truth were finally bared,
Would I believe, or would I be scared,
For I realize the consequences
Of a world where ignorance is bliss and blissfully shared
And knowledge is terrifying

Tell me why for either side
The average learner is trapped inside
An empty box with few cold facts

Spare me from pain

The unknown,
The feared,
The trusted.

CONTENTS

Chapter 1: Introduction..... 8
1.1 Background and Rationale..... 8
1.2 Research Objectives: Media Representation and Vaccination Discourse..... 12
1.3 Structure of the Thesis..... 14

Chapter 2: Literature Review..... 16
2.1 Infant Vaccination Advocacy and Hesitation: Current Literature..... 16
2.2 Vaccines Don't Cause Autism?: Current Literature..... 20
2.2 Media Influence on Health Decisions..... 21
2.3 Vaccination Discourse and Public Opinion..... 23
2.4 Media Bias and Ideological Influence..... 25
2.5 Furthering the Conversation..... 27

Chapter 3: Methodology..... 28
3.1 Data Collection..... 28
3.2 Coding and Categorization..... 31
3.3 Future Research Methods..... 32

Chapter 4: Media Representation of Infant Vaccination..... 33
4.1 Chapter 6: Analysis: Influence of Media Discourse on Perceptions and Beliefs..... 35
4.2 #vaccinescauseautism..... 36
4.3 #antivaccine..... 39
4.4 #PARENTS AGAINST VACCINES..... 42

Chapter 5: Content Analysis..... 44
5.1 Word Usage Over Time..... 44
5.2 Personal Testimonies Analysis..... 48
5.3 White Blood Clots.....49
5.4 Vaccines and Autism.....50
5.5 Scientific Reasoning for Vaccines Causing Autism.....51
5.6 The Plandemic..... 52
5.7 "Waging War on the Autistic Child: The Arizona 5 and the Legacy of Baron von Munchausen"..... 54
5.8 Assessing Vaccine Efficacy Through Personal Narratives..... 56

Chapter 6: Analysis of Media Discourse on Perceptions and Beliefs..... 58
6.2 Logical Reasoning and Logical Fallacies in the Face of Uncertainty..... 58
6.3 Analyzing Community Decision Making Processes.....60

Chapter 7: Conclusion.....61
7.1 Summary of Findings.....61
7.2 Implications, Recommendations, Interventions, and Strategies..... 61
7.3 Limitations and Future Research..... 61
7.4 Closing Remarks.....61

A child enters this world with a biological blueprint that will be influenced positively and negatively by their environment. The decisions of parents and caretakers form consequences of exponential significance in which the child cannot partake.

Vaccines can be a major source of fear for parents who do not trust them. We should consider the systems that may influence decision-making and trust-building processes, their validity, and the tactics employed to garner support. One system seems particularly influential: social media.

ACKNOWLEDGEMENTS

Thank you to my thesis advisor, Zachary Elkins, for guiding me in the realm of discourse analysis and sparking my interest in etymology. Also, a heartfelt thank you to my second reader, Kathryn Tackett, for offering academic and personal support throughout this journey.

Thank you to Charis Hills Summer Camp for fostering an inclusive and fun environment for children with autism. Charis Hills is the inspiration for this thesis, as it introduced me to a community of parents of children with autism who are sometimes concerned about vaccine safety.

I extend profound gratitude to my mother and husband for their unwavering support in caring for Joel, my 6-month-old, allowing me the focus and time needed to immerse myself in the completion of this paper.

ABSTRACT

Author: Dava McDaniel
Title: From Pixels to Public Health: Non-Traditional Discourse on Infant Vaccination
Supervising Professor: Zachary Elkins

This thesis delves into the discourse surrounding infant vaccination, exploring diverse perspectives presented in various online sources, with a particular focus on non-traditional platforms often deemed "non-credible" , or “non-traditional” such as Twitter and Facebook.

Through an analysis of stories and opinion pieces, the thesis aims to examine the opinions and facts presented by different authors, with a focus on content that could be perceived as "*misinformation*" regarding infant vaccination. The study explores key arguments such as health concerns linked to vaccination, government distrust, the alleged association with autism, and personal testimonies.

I investigate online communities like @DrWakefield and #vaccinescauseautism on Twitter and Facebook. The methodology involves selecting posts from the specified source that represents a new category of argumentation. Categories of argumentation may be personal allegory, scientific research, expert opinion, historical examples, etc. Then, a set of standardized questions was applied to all posts to find the main opinions, or bias, expressed. Recognizing the diversity in interpreting social media posts, I employ a dual approach: initially utilizing artificial intelligence with Chat GPT to deduce primary arguments and subsequently incorporating content discernment to ensure fidelity to the original content. In cases where the primary source is a media or video format, I transcribe the content. For all posts, I categorize it as "for," "against," or "neutral" concerning infant vaccination. Furthermore, employing cultural analysis, I explore potential biases, logical fallacies, cultural references, and political affiliations inherent in the discourse. This analytical framework incorporates content analysis and considers the speaker's tone and the usage of societally recognized phrases, people, and references.

The cultural analysis emphasizes the importance for mainstream news media sources, academic departments, institutions like the CDC, and the broader populace to exhibit discernment and empathy towards self-identified "conspiracy theorists." This necessity arises from the prevalent exposure of these individuals to fear-laden and rhetorically potent narratives disseminated across social media platforms.

THESIS QUESTIONS:

1. How do online discussions surrounding infant vaccination reflect and contribute to the dissemination of information labeled as "*misinformation*," and what factors contribute to the persistence of such narratives within various online communities?

2. What are the predominant arguments presented in online dialogues about infant vaccination, and how do these arguments vary across traditional and non-traditional sources? How do personal testimonies, health concerns, government distrust, and religious views shape these discussions?

3. In what ways do social media platforms, specifically Twitter (@DrWakefield) and hashtag movements like #vaccinescauseautism, influence and shape the narrative around infant vaccination? How do different communication styles, cultural references, and political affiliations within these online communities contribute to the polarization of opinions on this topic?

A PIECE FOR SELF-CONTEMPLATION:

How does society navigate the complexities of conspiracy theories, dissenting opinions, and open dialogue? How can we, and should we, maintain the principles of liberty and recognize the humanity in individuals labeled as *conspiracy theorists*?

Chapter 1: Introduction

1.1 Background and Rationale

From the moment of conception, parents and caregivers wield a profound influence on the trajectory of their children's lives, molding and shaping their destinies well before the first breath is taken. Choices related to nutrition, for example, such as the selection of foods and meal habits, contribute to a child's physical well-being and can influence long-term health outcomes. Access to healthcare and preventive measures shape a child's overall health status. Additionally, parents' lifestyle choices, including physical activity and modeling healthy behaviors, set the foundation for a child's attitude toward fitness and well-being. Emotional and mental health are also influenced by parental decisions, encompassing factors like creating a supportive home environment, addressing mental health issues promptly, and fostering open communication about emotions. These decisions extend to choices surrounding the birthing process, for example. More US moms are now opting for birthing experiences outside of hospitals, whether at home or in birthing centers. Since 2004, this growing trend has positioned the United States as a leader in out-of-hospital births among developed countries, showcasing an evolving approach to maternal care and the birthing process.[1] While the growth of homebirth is a

[1] Grunebaum, Amos, and Frank A. Chervenak. "Out-of-hospital births in the United States 2009–2014." *Journal of Perinatal Medicine* 44.7 (2016): 845-849.

multifaceted system, one reason some mothers choose to stay home is **institutional distrust**.

Similarly, more parents are now navigating **the decision to vaccinate or not vaccinate their children.** This choice has become a significant aspect of parenting, reflecting an evolving approach to healthcare practices and disease prevention. The decision to vaccinate is also multifaceted, with some parents expressing skepticism or distrust in institutional recommendations, and others citing religious or personal convictions. Once their child is born, some mothers, whether driven by protectiveness or a sense of distrust, may choose alternative medicine or opt not to have their child cared for by a pediatrician at all.

As of 2024, the prevailing sentiment in academic circles deems trusting institutionalized medicine and vaccination as the advisable course. However, **social media channels have presented a contrasting narrative.** Mainstream and unconventional media sources, collectively, emerge as potent platforms, propagating the idea that relying on institutionalized medicine poses risks to a child's physical and intellectual safety. This dichotomy is a complex issue for mothers and caretakers to navigate, where professional advice and social media narratives, for example, may diverge significantly.[2] Parents are receiving information from various places, including mainstream news media, friends, family, doctors, co-workers, spouses, radio, television, and perhaps even their children.

[2] Çelik, Taylan, and B. U. K. E. T. Başaran Tarhan. "Trust, distrust and skepticism: Parent's perspective on COVID-19 prevention and vaccination in children aged 0-5 years." *Trends in Pediatrics* 4.2 (2023).

The choices made by parents and caregivers hold profound consequences, intricately shaping the health and well-being of the child in both immediate and enduring ways. At the core of this decision-making process lies the influence of both credible and non-credible media sources.

This research aims to delve into the intricacies of media representation, with a specific focus on infant vaccination discourse. As purveyors of information, news media plays a pivotal role in shaping public opinion, attitudes, and behaviors.

Understanding the psychological underpinnings of media influence becomes imperative in unraveling the factors that contribute to diverse perspectives on vaccine-related decisions. **While exploring the overall opinions and psychological influences associated with social media would be a noble research topic, this thesis lacks the breadth to cover such a vast scope.** The scope of this research is limited by many factors. Psychoanalysis is not possible, due to the inability to consult people in real-time, and we can't analyze some of the more prevalent and most-shared posts due to a lack of resources to discern what posts are the most shared and prevalent among online communities.

This research is done in case-study format in hopes of understanding what information a parent could potentially come in contact with before making decisions concerning vaccination. **There are no fully-representative samples,** and the information collected is

written by average people, often without any accreditation for the information they are sharing. There is some benefit, however, to exploring information in this way. **No average citizen has the luxury of exploring vaccine information through fully represented samples of information.** As a whole, people collect fragments of information over time, whether it be through social media, accredited research, friends, or family. Therefore, this research is special because it captures a moment in real-time for many citizens. The data, collected in its entirety in February of 2024, shows what a person interested in vaccine-related "*conspiracy*" might encounter in a single browsing session.

This type of analysis is important for understanding information consumption in the digital age. The case-study approach allows for a more in-depth exploration of the information landscape, shedding light on the diverse sources, narratives, and arguments that individuals may encounter in their online interactions. **The insights gained from this analysis should serve as a testament to the importance of actively listening to marginalized voices, or people deemed "*conspiracy theorists*", not to prove them right or wrong, but to foster an environment where dissenting viewpoints can contribute to an understanding of how people in our community think and process information.**

The psychological impact of media on individuals' perceptions and decision-making processes has been a subject of profound scholarly interest. Drawing from psychological

theories such as agenda-setting, framing, and cultivation theory, this research seeks to explore how media narratives surrounding infant vaccination may influence the beliefs and attitudes of the general populace. After collecting various posts from social media, the research will investigate logical fallacies within the domain of infant vaccination discourse by closely examining arguments found in various online sources. Logical fallacies, which represent errors in reasoning, will be identified and analyzed to assess their impact on the validity and reliability of the presented arguments. **A logical fallacy in an argument does not necessarily invalidate the conclusion, but it does undermine the argument's logical coherence and reliability. It suggests that the argument may lack a valid premise, rely on an unproven premise, or contain other flaws in reasoning.** This examination will encompass an evaluation of coherence, relevance, and soundness within the context of vaccine-related discussions. The study aims to uncover instances where misinformation or flawed reasoning may distort the discourse, potentially contributing to disseminating inaccurate beliefs about infant vaccination. Through the dissection of these logical fallacies, the research seeks to offer a critical assessment of the arguments prevalent in online platforms, contributing to a more in-depth understanding of the factors that shape public perceptions and decision-making regarding infant vaccination **without favoring any particular stance**. **There is merit in opting not to adopt a particular stance, particularly when considering the importance of examining opinions that are frequently subjected to ridicule or dismissal.**

Social media platforms like Twitter and Facebook are often perceived as "non-credible" in traditional journalistic terms due to the decentralized and user-generated nature of content on these platforms. However, for this study, **they are categorized as "non-traditional news sources"** because they play a significant role in shaping public discourse and disseminating information, whether the statements present are proven accurate or not.

In the context of studying what people read on the internet and understanding the dynamics of public opinion formation, these platforms are invaluable. Users often share personal experiences, opinions, and information related to various topics, including infant vaccination. This wealth of user-generated content allows researchers to observe real-time reactions, identify prevalent narratives, and gauge the public sentiment surrounding the subject.

While the credibility of individual posts on social media may vary, the collective impact of these platforms on public perception and decision-making processes cannot be ignored. Hence, referring to them as "non-traditional news sources" emphasizes their role as sources of information that people actively engage with.

The term "misinformation" is intentionally avoided in this study, not only due to its political undertones but also because the primary focus is not on determining the absolute accuracy of the information presented in non-traditional media sources regarding infant

vaccination. Instead, the emphasis is on analyzing the various perspectives, opinions, and arguments circulating on these platforms. The goal is to understand how these non-traditional sources contribute to the broader discourse and shape public perceptions, irrespective of the factual accuracy of the information. By sidestepping the dichotomy of true or false, the study aims to capture the diverse narratives and the nuances in public discussions around infant vaccination, recognizing that beliefs and opinions may vary across a spectrum without strictly conforming to binary categorizations of accuracy or misinformation. This approach allows for a more comprehensive exploration of the complexity inherent in online conversations about vaccination.

By delving into the dimensions of media influence, this research endeavors to unravel the complexities surrounding infant vaccination narratives. The subsequent chapters will dive into the methodological approach, data collection, and analysis, seeking to provide a better understanding of media representation and its profound impact on public health decisions.

1.2 Research Objectives: Media Representation and Vaccination Discourse

The primary objective of this research is to examine the relationship between media representation and vaccination discourse. As a cornerstone of modern medicine, vaccination stands at the intersection of science, public health, and societal perspectives. Through a lens focused on media representation, this study seeks to achieve the following research objectives:

1. Examine and analyze the approach of non-traditional media sources towards infant vaccination, investigating how these platforms contribute to the discourse and potentially shape public perceptions of vaccination.

2. Investigate the characteristics of information related to infant vaccination within online sources, distinguishing key arguments such as health concerns, government distrust, alleged associations with autism, personal testimonies, or religious viewpoints.

3. Assess the impact of social media platforms, specifically key actors (@DrWakefield) and hashtag movements like #vaccinescauseautism, on the shaping and dissemination of narratives surrounding infant vaccination, with a focus on communication styles, cultural references, and political affiliations within these online communities.

4. Apply a comprehensive analytical framework, incorporating content analysis to identify and understand potential biases within media representations of infant vaccination.

Research objectives include scrutinizing the approach of non-traditional media sources, investigating prevalent narratives and characteristics of information, assessing the impact of social media platforms, and applying an analytical framework to identify potential

biases in media representations. Through these objectives, the study seeks to provide a straightforward and informed analysis of how media influences and disseminates narratives related to infant vaccination, contributing valuable insights into what the average parent might be exposed to when searching for vaccine-related information on social media.

Revealing logical fallacies serves to highlight the unreliability of social media posts as sources of credible arguments. However, beyond this immediate consequence, my overarching objective in identifying these posts is to offer insights into the daily experiences of typical information seekers. By showcasing the content encountered during casual consumption of media, I aim to shed light on the range of information to which our minds are subjected when engaging with digital platforms.

1.3 Structure of the Thesis

Chapter 1 is an introductory chapter that provided background information and outlined the research objectives. Next, Chapter 2 will detail the literature review, exploring existing scholarship on infant vaccination advocacy, hesitancy, and related topics such as a link between vaccines and autism. This review sets the foundation for understanding the broader context within which non-traditional discourse on vaccination operates. Chapter 3 elucidates the methodology employed in the research, detailing the data collection process, coding procedures, and potential avenues for future research. This chapter aims to outline the methodological approach adopted in the study, ensuring rigor and reliability in the analysis of non-traditional discourse on infant vaccination. Chapters 4 and 5 focus on the analysis of media representation and content analysis, respectively. These chapters examine the various themes, narratives, and arguments present in non-traditional media discourse on infant vaccination. Chapter 6 goes deeper into the analysis of media discourse, exploring logical reasoning, logical fallacies, and community decision-making processes evident in non-traditional platforms. This chapter aims to find the underlying mechanisms influencing public discourse on vaccination in digital spaces. Chapter 7 is the conclusion, summarizing the key findings of the thesis, discussing their implications for public health policies and practices, and proposing potential avenues for future research. This chapter serves as a culmination of the study, providing insights into the broader significance of non-traditional discourse on infant vaccination and its implications for public health communication strategies.

Chapter 2: Literature Review

2.1 Infant Vaccination Advocacy and Hesitation: Current Literature

The scholarly exploration of media's influence on infant vaccination, parallel to broader research on COVID-19, autism, and other "anti-vax" developments, is in its early stages. The following literature helps to detail the foundation of research concerning media in shaping public opinion, of which the following authors all agree.

Current research suggests that vaccine hesitancy may be different among population groups but similar in psychological constructs.[3] A study from Nature Communications contributes to our understanding of COVID-19 vaccine attitudes in Ireland and the United Kingdom. Their study sheds light on the prevalence rates of vaccine hesitancy and the psychological constructs associated with it. It underscores the profound global repercussions of the pandemic, encompassing both health crises and substantial economic costs. The urgency for a viable vaccine is emphasized, prompting an exhaustive exploration of the factors influencing public acceptance, hesitancy, or resistance to vaccination. The study delineates four primary objectives: firstly, to ascertain the prevalence of acceptance, hesitancy, and resistance within the adult populations of Ireland and the UK; secondly, to profile individuals exhibiting vaccine hesitancy or resistance by delineating distinguishing sociodemographic, political, and health-related factors; thirdly,

[3] Murphy, Jamie, et al. "Psychological characteristics associated with COVID-19 vaccine hesitancy and resistance in Ireland and the United Kingdom." *Nature communications* 12.1 (2021): 29.

to identify salient psychological characteristics of hesitant/resistant individuals; and lastly, to comprehend the information sources and trust levels of vaccine-hesitant individuals.

In both groups studied, individuals resistant to a COVID-19 vaccine demonstrated a lower likelihood of seeking information about the pandemic from “traditional” sources. Additionally, they exhibited comparable levels of mistrust in these sources when compared to respondents who accepted the vaccine. This aligns with the overarching theme of the thesis, emphasizing the apparent trustworthiness of mass media representation in shaping perceptions and attitudes surrounding vaccination.

The investigation into the sources and trust levels of vaccine-hesitant individuals establishes a link between media representation and vaccine-related decisions. While recognizing the limitation of generalizing findings to other populations, this study provides a methodology that may prove valuable for those seeking insights into COVID-19 vaccine hesitancy in different contexts.

Over the past two to three decades, a growing number of caregivers in industrialized nations have opted not to vaccinate their children, prompting discussions about an anti-vaccination "movement".. Studies performed before the COVID-19 outbreak have questioned the validity of attributing the decline in vaccination rates to the actions of an

influential anti-vaccination movement.[4] Drawing on empirical data from the UK and the Netherlands, one study explores the claims, actions, and discourse of anti-vaccination groups, as well as the perspectives of caregivers on vaccines. The paper highlights the historical context of vaccination resistance and the evolving nature of anti-vaccination sentiments. It critically examines the use of the term "social movement" in characterizing contemporary vaccination-related concerns and protests, emphasizing the need for a nuanced understanding that goes beyond simplistic categorizations. The discussion also dives into the role of media in shaping perceptions of vaccination and the potential impact of such framing on public health practices. In the 19th century, concerns were centered around civil liberties and the state's right to intervene in the working-class body. Present-day debates in industrialized nations focus on the right to make informed choices, aligning with the shift towards individual rights and responsibilities in the rhetoric of healthcare. The discussion shows the ideological conflict within public health, where individual rights clash with expert articulations of the common good.

The reflexive dimension of the current debate, absent a century ago, is highlighted, emphasizing contestation and the role of health activist groups. Public health responses to vaccination resistance are discussed, ranging from dismissing parental doubts to recognizing the need for a more nuanced approach that involves dialogue and mutual respect. The paper concludes by exploring the potential effectiveness of deliberative

[4] Blume, Stuart. "Anti-vaccination movements and their interpretations." *Social science & medicine* 62.3 (2006): 628-642.

democracy and the challenges posed by opposing viewpoints in the context of scientific citizenship.

Recent research conducted by Emily A. Harrison and Julia W. Wu explores the impact of the COVID-19 epidemic on vaccine refusal and introduces the concept of "vaccine confidence."[5] Their critique of contemporary approaches to reducing vaccine hesitancy aligns with the broader theme of the thesis. The article emphasizes the need to reimagine public health culture and vaccine safety regulations, considering social, political, and moral aspects in addition to biological factors. The authors caution against excessive vaccine optimism and advocate for a comprehensive understanding of public health beyond vaccine technology.

They argue that achieving true vaccine confidence requires narrative work and policy actions that extend beyond the development of specific COVID-19 vaccines. The article highlights the complex interplay between infectious diseases, vaccines, and public perceptions, calling for a more inclusive approach to public health. By urging a reimagining of the culture of public health, the essay aligns with the overarching goal of the thesis to understand the societal implications of media representation on health-related decisions.

[5] Harrison, Emily A., and Julia W. Wu. "Vaccine confidence in the time of COVID-19." *European journal of epidemiology* 35.4 (2020): 325-330.

Media perception on vaccination[6] has been a subject of extensive research across the world, with scholars examining how media coverage influences public attitudes, beliefs, and behaviors related to vaccination. The scholarly works in this area often explore the role of traditional media, social media, and online platforms in shaping public opinions about vaccines.

Another important area of study is the impact of media framing on vaccination-related stories,[7] investigating how different frames, such as risk-focused or benefit-focused framing, may influence public perception of the necessity and safety of vaccines. The rise of social media has introduced new dynamics to the communication landscape, prompting researchers to explore how information spreads through social networks, the role of influential figures, and the impact of user-generated content on vaccine hesitancy or acceptance. In one Routledge study, it was found that social media posts overwhelmingly presented opinion statements rather than facts, a scary reality for those who use social media as their only source of education regarding healthcare. This is similar in what we have found in our discourse analysis.

[6] Van Nguyen, Duy, and Phi-Hung Nguyen. "Social media and COVID-19 vaccination hesitancy: mediating role of the COVID-19 vaccine perception." *Heliyon* 8.9 (2022).
[7] Holton, Avery, et al. "The blame frame: Media attribution of culpability about the MMR–autism vaccination scare." *Health communication* 27.7 (2012): 690-701.

2.2 Vaccines Don't Cause Autism?

This chapter provides an impartial examination of the current literature surrounding the potential link between vaccines and autism spectrum disorder (ASD). It presents various reasons put forth by scientists and researchers that support the conclusion that vaccines do not cause autism, as well as the counterarguments presented by some advocates.

The debate surrounding vaccines and autism most notably stems from the publication of a controversial study in 1998 by Dr. Andrew Wakefield and colleagues[8], which suggested a connection between the measles-mumps-rubella (MMR) vaccine and autism. Subsequent studies have investigated this claim and have yielded findings that do not support a causal relationship between vaccines and autism. The key reason cited by scientists to refute the vaccines-autism hypothesis is the lack of scientific evidence (or statistical significance) supporting such a link. Numerous epidemiological studies, including large-scale cohort studies and meta-analyses, have consistently found no association between vaccines, including the MMR vaccine, and the development of autism.[9]

However, one potential counterargument often presented by members of the anti-vaccine community is that the reported cases linking vaccines to autism are relatively rare and statistically insignificant, thus being unable to be proven using large randomized

[8] Wakefield, Andrew et al. "Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children." The Lancet, vol. 351, no. 9103, 1998, pp. 637-641.

[9] Gabis, Lidia V., et al. "The myth of vaccination and autism spectrum." *European Journal of Paediatric Neurology* 36 (2022): 151-158.

samples.[10] They argue that the number of reported adverse events following vaccination, including instances of autism diagnosis, is too small to establish a definitive causal relationship between vaccines and autism spectrum disorder (ASD).

Expert reviews conducted by reputable organizations such as the Institute of Medicine (now the National Academy of Medicine) and the Centers for Disease Control and Prevention (CDC) have independently concluded that there is no causal relationship between vaccines and autism. These reviews have examined a wide range of evidence, including clinical trials, observational studies, and biological mechanisms, and have consistently reaffirmed the safety and efficacy of vaccines. From the viewpoint of antivaccine activists, the rarity of vaccine risks does little to comfort individuals who actually experience adverse reactions. These groups have become more effective in voicing their opinions through both electronic and print media, often accompanied by compelling personal narratives. Given that the media often present controversies without clear resolution and prioritize "balance" over depth of perspective, a key challenge lies in building credibility and trust with the audience. "DTP: A Shot in the Dark: Why the P in the DTP Vaccination May Be Hazardous to Your Child's Health", for example, explores potential hazards associated with the pertussis component (the "P") of the DTP (Diphtheria, Tetanus, and Pertussis) vaccination.[11]

---

[10] Chen, W., et al. "No evidence for links between autism, MMR and measles virus." *Psychological medicine* 34.3 (2004): 543-553.
[11] Coulter, Harris Livermore, and Barbara Loe Fisher. *A shot in the dark: why the P in the DPT vaccination may be hazardous to your child's health*. Penguin, 1991.

Skepticism may also stem from allegations that even reputable organizations can be influenced by external pressures, including financial interests and corporate influence.[12]

Critics of vaccination programs frequently point to the substantial profits generated by pharmaceutical companies as evidence of potential conflicts of interest. They argue that vaccine manufacturers have a vested interest in promoting widespread vaccination, regardless of safety concerns, to maximize their profits. This suspicion is exacerbated by instances of regulatory agencies collaborating closely with vaccine manufacturers, leading to accusations of collusion and bias in vaccine safety assessments.

Moreover, concerns about the integrity of research conducted by government agencies and academic institutions have been raised, with some individuals alleging that these entities may prioritize financial interests over public health. This skepticism is fueled by instances of regulatory capture, where government agencies responsible for overseeing vaccine safety have been accused of being unduly influenced by the industries they are supposed to regulate.

Another intriguing hypothesis posits that instances of vaccines causing autism may be suppressed in the name of public health. This theory suggests that influential entities,

[12] Habakus, Louise Kuo, Mary Holland, and Kim Mack Rosenberg, eds. *Vaccine epidemic: how corporate greed, biased science, and coercive government threaten our human rights, our health, and our children*. Simon and Schuster, 2011.

often referred to by conspiracy theorists as the "powers that be," may censor such cases to maintain public confidence in vaccination programs. Given the significant role vaccines have played in controlling the spread of numerous diseases, proponents of this theory argue that any potential association between vaccines and autism could lead to widespread vaccine hesitancy and refusal.

Tthe ramifications of widespread vaccine hesitancy could be profound, potentially leading to a resurgence of preventable diseases and increased mortality rates. If mothers were to harbor even the slightest suspicion that vaccines could cause autism in their children, it could precipitate a widespread decline in vaccination rates, undermining herd immunity and leaving vulnerable populations susceptible to outbreaks of infectious diseases.

In this context, proponents of vaccination may argue that *withholding* information about potential adverse effects of vaccines, including the possibility of autism, is *justified* in order to preserve public health. They may contend that the greater good is served by maintaining high vaccination rates, even if it means *suppressing* information that could cause concern or skepticism. This argument has further increased the reluctance of skeptics to trust mainstream pro-vaccination information.

Advocates for vaccination may argue that transparency and informed consent are fundamental principles of medical ethics. They may assert that individuals already have a

right to access accurate information about the risks and benefits of vaccination in order to make informed decisions about their healthcare. Moreover, they may question the ethics of withholding information that could impact the health and well-being of individuals and communities, and say that the accusation is unfounded.

In an ideal healthcare setting, transparency regarding medical errors and near misses is crucial for improving patient safety and preventing future incidents. However, the reality is a bit more complicated. The Institute of Medicine has estimated that a significant number of patient deaths each year result from medical errors, emphasizing the urgency of improving error reporting systems.[13] However, despite ethical and professional obligations, many barriers exist that inhibit the reporting of medical errors, including fears of legal repercussions and loss of professional privileges.

One case study presented by the Journal of Patient Safety exemplifies one dilemma involving a 90-year-old woman undergoing pleurocentesis. Due to a radiograph film being inserted backward, the procedure was mistakenly planned for the wrong lung side. While the patient experienced no adverse effects, the physician faced a decision: whether to report the error and risk potential sanctions, or proceed without disclosure.

[13] Paterick, Zachary R., et al. "The challenges to transparency in reporting medical errors." *Journal of Patient Safety* 5.4 (2009): 205-209.

APA

The imperative for transparency in reporting medical errors stems from ethical principles and the imperative to prioritize patient well-being. Despite potential repercussions, addressing these issues is vital for building trust and improving patient safety within the healthcare system. This possibility of malpractice lawsuits and sanctions dissuading practitioners from admitting to malpractice is also a convincing factor for some people who do not believe vaccinations are safe.

Doctors claim vaccines are designed to stimulate the body's immune response to specific pathogens *without* altering the fundamental biological processes involved in brain development or neurological function. Moreover, the ingredients in vaccines, such as thimerosal[14] (a preservative containing ethylmercury) and aluminum adjuvants, have been extensively studied and found to be safe for use in vaccines.

Again, however, vaccine hesitant proponents propose that there is continuing research on inflammation caused by immune responses that cause brain inflammation.[15] And, many people still question immune responses to mercury in thimerosal.[16]

---

[14] Seneff, S., Davidson, R. M., & Liu, J. (2012). Empirical Data Confirm Autism Symptoms Related to Aluminum and Acetaminophen Exposure. Entropy, 14(11), 2227-2253.

[15] Tomljenovic, L., Dórea, J. G., & Shaw, C. A. (2012). A Link Between mercury exposure, Autism Spectrum Disorder, and other neurodevelopmental Disorders? Implications for thimerosal-containing Vaccines. Journal Title, 18(1), 35-38.

[16] Geier, D. A., et al. "A comprehensive review of mercury provoked autism." *Indian Journal of Medical Research* 128.4 (2008): 383-411.

The purpose of the discussion presented in section 2.2 is not aimed at persuading individuals to believe in vaccine-related harm. Instead, its objective is to shed light on some of the fundamental arguments put forth by the anti-vaccine and "vaccines cause autism" movements. By doing so, the intention is to foster a greater sense of empathy and understanding when evaluating arguments that lack factual support or logical coherence, but are nonetheless passionately advocated. They are not often crafted out of thin air and are part of a larger discussion on vaccine safety and efficacy. Whether the author understands these arguments or not, many people have heard these arguments as the most sound and convincing, and what is shared on social media seems to often be supplementary, eye-catching, and “new news”.

2.2 Media Influence on Health Decisions

There are many ways that these supplementary social media posts can alter vaccine perception without providing clear and logical premises.

Agenda-setting Theory:

Agenda-setting posits that the media has the power not only to shape what people think about but also to influence the importance assigned to specific issues.[17] In the context of infant vaccination, understanding how outlets prioritize and highlight certain aspects of the discourse can unveil the agenda they set for their audiences.

Framing Theory:

Framing theory includes how the choice of language, imagery, and presentation molds individuals' interpretations of issues.[18] In the realm of infant vaccination, the framing of stories – whether emphasizing benefits, risks, or uncertainties – plays a pivotal role in shaping public perceptions. This research will scrutinize the framing techniques employed by major platforms to uncover the nuances of how vaccination-related information is presented to the audience.

Cultivation Theory:

[17] Eshbaugh-Soha, Matthew. "Presidential agenda-setting of traditional and nontraditional news media." *Political Communication* 33.1 (2016): 1-20.
[18] Cissel, Margaret. "Media Framing: a comparative content analysis on mainstream and alternative news coverage of Occupy Wall Street." *The Elon Journal of Undergraduate Research in Communications* 3.1 (2012): 67-77.

Cultivation theory posits that prolonged exposure to media content can shape individuals' perceptions of reality.[19] Applying this theory to the context of infant vaccination, the research will investigate how consistent messaging in media contributes to the cultivation of beliefs, potentially influencing vaccination decisions.

Media assumes a central and influential role in shaping public opinion, particularly in the domain of health, with a specific focus on vaccination choices. Scholars investigating the concept of framing within the media reveal that the strategic presentation of stories, whether emphasizing risks, benefits, or controversies, significantly molds public attitudes toward vaccines.

[19] Romer, Daniel, Kathleen Hall Jamieson, and Sean Aday. "Television news and the cultivation of fear of crime." *Journal of communication* 53.1 (2003): 88-104.

2.3 Vaccination Discourse and Public Opinion

This section explores the nature of discussions surrounding vaccination and how they shape the attitudes, beliefs, and behaviors of the public.

Vaccination discourse encompasses a wide array of conversations, debates, and information exchanges related to vaccines. It occurs across various platforms, including traditional media, social media, and interpersonal communication. The dynamics of this discourse are influenced by factors such as scientific developments, historical events, and prevailing societal attitudes toward health.

Identifying key influencers and stakeholders in vaccination discourse is crucial. These may include healthcare professionals, scientists, advocacy groups, and even celebrities. The voices that hold sway in the public sphere significantly impact the framing and tone of vaccination conversations. Recognizing the role of these influencers, such as congresspeople, Andrew Wakefield, and presidents, helps in understanding how their perspectives contribute to shaping public opinion.

Vaccination discourse often intersects with the concept of vaccine hesitancy, where individuals express reluctance or refusal to vaccinate. Discourses around vaccine hesitancy often claim that proponents are spreading misinformation. Opinions, evidence and concerns that circulate within public conversations are often discredited as

misinformation. This form of dialogue causes a divide causing those who have questions about vaccines to be seen as strange or ignorant.[20] Media portrayal, social media discussions, and public debates all contribute to the intricate landscape of vaccine hesitancy.

Public opinion on vaccination is not homogenous and is heavily influenced by cultural and socioeconomic factors. Different communities may engage with vaccination discourse in distinct ways, shaped by cultural norms, historical experiences, and socioeconomic conditions.

Discussions around vaccination prompt ethical reflections on responsible information dissemination. Balancing the management of infectious diseases with the recognition of individual autonomy and concerns poses a multifaceted challenge. Ethical considerations play a pivotal role in shaping communication strategies that prioritize trust, transparency, and collaboration between public health authorities and the general public. The prevailing ethical discourse among the pro-vaccine community seems to reflect that the life-saving impact of vaccinations outweighs potential adverse effects or risks associated with faulty vaccines, making vaccine hesitancy unwarranted.[21] This also presents an emotional side to the debate, where anti vaxxers are often called selfish for their reservation.

[20] Bernstein, Justin. "Anti-vaxxers, anti-anti-vaxxers, fairness, and anger." *Kennedy Institute of Ethics Journal* 31.1 (2021): 17-52.
[21] Piot, Peter. "1. A matter of life and death 4."

2.4 Media Bias and Ideological Influence

Media bias refers to the inclination of outlets to present information in a way that aligns with a particular viewpoint or ideology. Bias can manifest in various forms, including partisan, corporate, and sensational bias. Recognizing and analyzing these biases is crucial for comprehending how news is framed and consumed.

Partisan bias occurs when outlets exhibit a preference for a particular political party or ideology. This bias can influence the framing of stories, the selection of topics, and the language used in reporting. Partisan bias can contribute to the polarization of public opinion, reinforcing existing ideological divides within society.

Corporate bias arises when media outlets prioritize the interests of their owners or advertisers. This bias can affect the selection of stories, the emphasis placed on certain issues, and the overall framing of news. Understanding corporate bias is essential for evaluating the diversity of perspectives presented in the media landscape.

Sensational bias involves the exaggeration or dramatization of stories to capture audience attention. This is wildly important in today's media. This form of bias can lead to the prioritization of sensational or emotionally charged stories over more nuanced or complex issues. Sensational bias can shape public perceptions by influencing which stories receive the most visibility.

The framing theory of stories contributes to ideological influence by shaping how information is presented. Framing involves selecting certain aspects of an issue to highlight while downplaying others. This process influences the audience's interpretation and emotional response, ultimately contributing to the formation of ideological perspectives.

The advent of social media has introduced new dynamics, with algorithms contributing to the formation of filter bubbles—echo chambers where individuals are exposed to information that aligns with their existing beliefs. This phenomenon reinforces ideological influence by limiting exposure to diverse perspectives and contributing to the amplification of bias. Promoting media literacy and critical thinking is essential for mitigating the impact of bias on public opinion. Education initiatives that teach individuals to analyze and evaluate media sources.

Chapter 3: Methodology

3.1 Data Collection

Scholars researching the intersection of media and vaccination employ a range of methods to analyze the complex dynamics surrounding public health communication. Some common methodologies include Content Analysis[22], Survey and Experimental Studies[23], Interviews and Focus Groups, Meta-Analysis[24], Social Network Analysis[25], and more.

Content Analysis:

Method: Scholars conduct content analysis by systematically examining the content of media sources, such as news articles, broadcasts, or social media posts. They may analyze language use, framing techniques, and the overall tone of the coverage.

Why: Content analysis allows researchers to quantify patterns and trends within media representations of vaccination. It provides a structured approach to identifying key themes, sentiments, and biases in media discourse.

---

[22] An, Seon-Kyoung, and Karla K. Gower. "How do the news media frame crises? A content analysis of crisis news coverage." *Public relations review* 35.2 (2009): 107-112.
[23] Ladd, Jonathan McDonald. "The neglected power of elite opinion leadership to produce antipathy toward the news media: Evidence from a survey experiment." *Political Behavior* 32 (2010): 29-50.
[24] Edley, Nigel, and Lia Litosseliti. "Critical perspectives on using interviews and focus groups." *Research methods in linguistics* (2018): 195-225.
[25] Kwak, Haewoon, et al. "What is Twitter, a social network or a news media?." *Proceedings of the 19th international conference on World wide web*. 2010.

Survey and Experimental Studies:

Method: Researchers design surveys or experiments to gather data on public attitudes and behaviors related to vaccination, often influenced by media exposure. Surveys may include questions about media consumption habits and perceptions of vaccine-related information.

Why: Survey and experimental studies help researchers understand the impact of media exposure on public opinion. They provide insights into how different media messages influence individuals' beliefs and decision-making regarding vaccination.

Interviews and Focus Groups:

Method: Qualitative research methods, such as interviews and focus groups, involve engaging directly with individuals to explore their perspectives on vaccination. Researchers inquire about the sources of information, media literacy, and the influence of media on decision-making.

Why: These methods offer in-depth insights into the lived experiences and nuanced perspectives of individuals. They help uncover the underlying motivations and reasoning behind vaccine-related beliefs shaped by media exposure.

Meta-Analysis:

Method: Meta-analysis involves systematically reviewing and synthesizing existing research studies on a particular topic. Researchers aggregate findings from multiple studies to identify common patterns and draw overarching conclusions.

Why: Meta-analysis allows scholars to assess the cumulative evidence on media and vaccination, offering a comprehensive overview of the existing literature. It helps identify consistencies, discrepancies, and gaps in knowledge across diverse studies.

Social Network Analysis:

Method: Social network analysis explores the dissemination of information through social networks. Researchers analyze the structure and dynamics of social connections to understand how information about vaccination spreads within communities.

Why: This method provides insights into the role of interpersonal communication and social networks in shaping vaccine-related beliefs. It helps identify key influencers and communication pathways within communities.

To capture the essence of media representation, I utilize advanced artificial intelligence through ChatGPT to conduct an epidemiological content analysis. Using natural language processing techniques, I aim to unveil the linguistic landscape surrounding infant vaccination. This approach allows for a quantitative assessment of language use,

providing insights into prevalent sentiments, key phrases, and potential biases within the media discourse.

Moreover, I complement this quantitative analysis with qualitative scrutiny, selecting relevant posts from Twitter and Facebook groups, and citing the stories on YouTube and written articles that were shared. The inclusion of YouTube transcripts, a platform increasingly influential in disseminating and collecting information, allows for the exploration of visual narratives. If YouTube is used, it was used because the video was shared on Twitter or Facebook. The transcript was extracted and analyzed for its written content.

In tandem with the epidemiological approach, I incorporate cultural analysis to discern the recommendations and beliefs reflected in the media narratives by American citizens. Cultural analysis involves decoding the implicit cultural nuances embedded in news coverage, such as implications from the author posing, or references to historical events, shedding light on how societal norms and values influence media discourse on infant vaccination.

ChatGPT serves as a valuable tool in this aspect, assisting in the identification of culturally significant phrases and expressions within the media content. By integrating cultural analysis, I aim to uncover the symbiotic relationship between media representations and the broader cultural context, contributing to a more holistic

understanding of the factors influencing public perceptions of infant vaccination. Chat GPT was used exclusively in my analysis by answering a set of predetermined questions. Then cultural analysis was completed based on the answers to those questions. The responses from chat GPT were screened for truthfulness to the original content.

3.2 Coding and Categorization

In the process of analyzing media content, a systematic coding and categorization approach is paramount to discern the stance of each piece regarding infant vaccination. The coding scheme adopted for this research involves classifying media narratives into three overarching categories: "For," "Against," and "Neutral" to infant vaccination.

1. For:

- Definition: Content falling under this category explicitly supports and endorses infant vaccination. It may present information highlighting the benefits, efficacy, and necessity of vaccines. Positive language and affirmations regarding the importance of vaccination contribute to the classification as "For."
- Coding Criteria: Media segments that actively advocate for the positive aspects of infant vaccination, encouraging parents and caregivers to vaccinate their children.

2. Against:

- Definition: Content categorized as "Against" takes a stance opposing or expressing skepticism toward infant vaccination. This may include narratives questioning vaccine safety, efficacy, or necessity. Critical language and concerns about potential risks are indicative of an "Against" classification.
- Coding Criteria: Media segments that convey skepticism, opposition, or raise concerns about the safety, efficacy, or necessity of infant vaccination.

3. Neutral:

- Definition: Neutral content maintains a balanced and impartial position on infant vaccination, refraining from explicit endorsement or criticism. It may present factual information without taking a clear stance, allowing audiences to form their own conclusions.

- Coding Criteria: Media segments that provide information without displaying a clear endorsement or opposition to infant vaccination, fostering an unbiased and informative narrative.

Chapter 4: Media Representation of Infant Vaccination

The data collection process for this study was conducted with an approach to privacy and confidentiality. Utilizing a Virtual Private Network (VPN) and operating in incognito mode to secure an anonymous data gathering environment. The data collection took place during a specific timeframe, between the hours of midnight and 2 am on November 22nd, 2023. This strategic timing is aimed to minimize potential external influences and fluctuations in media content availability, allowing for a focused and consistent collection of relevant data.

I will provide an overview of a social media post. Complete with the following information. If something is not listed, I wrote, “NONE”.

1. Source:
2. Platform
3. Date of the post:
4. What is the headline or main subject?:
5. What is the caption?:
6. How many likes, views, etc?:
7. In one word, is the dialogue "for", "against", or "neutral" towards vaccination?:
8. Why?:

9. In one simple sentence, analyze any political bias, common phrases, words, and political atmosphere of the dialogue:
10. In one word, what is the most common word (besides filler words) in the dialogue:
11. Second most common?
12. Third most common?
13. Provide a cultural analysis in one sentence:
14. Include the three most common instances of scientific reasoning listed by the most mentioned claim to least mentioned.

4.1 Chapter 6: Analysis: Influence of Media Discourse on Perceptions and Beliefs

@DrWakefield

Summary of Key Findings

The data retrieved from @Dr.Wakefield predominantly revolves around tweets and posts from @DrWakefield on various platforms. Notable themes include the connection between vaccines and autism, opposition to vaccine mandates, concerns about media portrayal, and the condemnation of vaccines during pregnancy.

@DrWakefield's March 28, 2014 tweet suggests a link between vaccines and autism, reflecting a belief-driven perspective without scientific reasoning. This tweet coincides with a time when Donald Trump, not yet president, expressed skepticism about vaccines.

On August 8, 2015, @DrWakefield tweeted against SB277, a California vaccine mandate bill, sharing a parent's testimony about vaccine injury. This reflects a broader sentiment against vaccine mandates and raises concerns about safety issues, such as lack of informed consent and autoimmune reactions.

Another August 8, 2015 tweet by @DrWakefield portrays a narrative of media bias against anti-vaccine parents. The post condemns the use of caricatures and stereotypes, contributing to a divisive narrative surrounding vaccination choices.

Contrastingly, an August 10, 2015 tweet by @DrWakefield advocates against specific vaccines during pregnancy based on scientific evidence. This reflects a medical and health-oriented context, emphasizing the importance of vaccination to protect pregnant women and infants.

The August 15, 2015 tweet from @DrWakefield expresses concerns about vaccine safety and government influence, particularly related to SB277. The dialogue aligns with a political atmosphere opposing mandatory vaccinations and advocating for parental rights.

Demographics of Discourse Participants

The primary participant in the discourse is @DrWakefield, a figure who shares content on Twitter and other platforms. The discourse includes individuals concerned about vaccine safety, parents advocating for informed consent, political figures expressing skepticism, and those highlighting media portrayal biases. Understanding the demographics and perspectives of these participants is crucial for comprehending the nuances of the vaccine discourse

4.2 #vaccinescauseautism

Summary of Key Findings

November 19, 2018 - CNN

The discourse on this date, as presented by CNN, provides a analysis of the flu season, parents' vaccination choices, and expert opinions. The content abstains from taking a clear stance, centering on health-oriented discussions without overt political implications.

March 2, 2019 - Fearless Parent

Fearless Parent's contribution manifests as a call for political leadership against vaccine coercion. The post articulates concerns about vaccine hesitancy, delving into the motives of vaccine manufacturers and advocating for increased transparency, accountability, and justice in vaccination policies.

August 7, 2019 - Stop Mandatory Vaccination

This post, originating from Stop Mandatory Vaccination, delves into a narrative of vaccine injury, attributing negative effects to the MMR vaccine and contributing to the broader anti-vaccination movement. The sentiment is characterized by regret, refusal, and a subtle absence of a specific political atmosphere.

October 17, 2019 - BIDMC

BIDMC's contribution stands as a scientific exploration into autism, presenting findings regarding an immune response in the brains of individuals with autism. They claim the “First evidence of immune response targeting brain cells in autism". The discourse maintains a negative tone, offering valuable insights into potential autoimmune aspects of autism with overt bias towards vaccination causing autism.

October 27, 2019 - Tizzywoman

This personal engagement is marked by an encouragement for vaccination through a historical lens, leveraging an image of iron lungs to advocate for immunization to avoid epidemics like polio. This appeared as a pro-vaccine post on #vaccinescauseautism

December 12, 2019 - Stop Mandatory Vaccination

A personal narrative shared by Stop Mandatory Vaccination recounts a toddler's regression into autism after vaccination, followed by successful recovery through alternative treatments. The post remains negative, emphasizing personal struggles, recovery, and concerns about informed consent.

December 26, 2019 - StephLocricchio

StephLocricchio contributes a thought-provoking tweet questioning the reliability of chosen scientific beliefs, using a provocative statement about doctors smoking Camels to highlight potential flaws in conventional thinking. The sentiment is decidedly against mainstream scientific views.

July 14, 2021 - MedPage Today

MedPage Today's post revolves around the controversial return of a pediatrician, Dr. Paul Thomas, who faced restrictions for promoting irregular vaccine schedules. The discourse is against such non-standard vaccination practices, framing the issue as a case of misinformation and potential patient harm.

The demographics of discourse participants encompass a diverse array of entities, each offering distinct viewpoints and contributions. CNN, a prominent mainstream media outlet, delivers neutral and health-focused content aimed at a wide audience. Fearless Parent serves as an advocacy platform, vocalizing concerns regarding vaccine coercion and highlighting the influence of politics and legislation on vaccination policies. Stop Mandatory Vaccination contributes narratives centered on vaccine injury and fosters anti-vaccination sentiments within specific communities. BIDMC, a medical institution, engages in scientific discourse, presenting research findings devoid of explicit political affiliations. Tizzywoman advocates for vaccination through historical reminders, promoting immunization without overt political undertones. StephLocricchio expresses skepticism towards mainstream scientific beliefs, challenging the reliability of established scientific perspectives. MedPage Today, a medical news outlet, reports on controversial practices within the medical community and takes a stance against irregular vaccine schedules.

4.3 #antivaccine

Summary of Key Findings

November 8, 2021 - The Huffington Post

The tweet from @haaohaoo uses irony to criticize the situation of a North Dakota lawmaker, Republican Rep. Jeff Hoverson, contracting COVID-19 and missing his own anti-vaccine rally. The content criticizes Hoverson's use of ivermectin, a deworming drug, as a COVID-19 treatment, highlighting the differences between ivermectin and traditional treatments. This post is pro-vaccination without offering justification.

November 30, 2021 - NBC News

The post by @KrauseForIowa uses irony to criticize the death of Marcus Lamb, a Christian conservative network CEO who died after contracting COVID-19. Lamb, known for opposing vaccines, becomes a focal point of controversy. The content condemns the opposition to vaccines and provides information about the Delta variant and CDC booster advice.

February 8, 2022 - Stuff

The tweet from @NZStuffPolitics reports on three anti-vaccine mandate protesters being arrested and charged with obstruction during a protest in Wellington, New Zealand. The content criticizes the protesters, labeling them as "far-right" and "anti-vax," emphasizing the confrontations between protesters and the police at Parliament.

September 28, 2022 - @PeterHotez

@Glenntenney shares a post by @PeterHotez discussing the risks of COVID-19, influenza, and polio due to low vaccine uptake and rising anti-vaccine activism. The content emphasizes the consequences of anti-vaccine activities on public health, citing reasons for the acceleration of anti-vaccine activities.

September 29, 2022 - Scorpio Secrets

@ScorpiosSecrets8 expresses frustration over Facebook deleting an anti-vaccine group. The content questions Facebook's authority in deleting the group, using hashtags like #AntiVaccine, #censored, and #facebook. It underscores the perceived infringement on freedom of speech and censorship.

November 21, 2022 - Rumble

@FarmingandJesus shares a documentary titled "Died Suddenly," portraying depopulation as the greatest ongoing mass genocide in human history. The content emphasizes distrust in the “global elite” and promotes alternative health solutions. It raises questions about the intentions of the “global elite” in depopulation. Introduces various places to purchase supplements and “protections”.

February 8, 2023 - Castanet.net

@Cindian1 reports an incident where a Vernon man was beaten at an anti-mandate rally. The content expresses concern over the assault, highlighting the victim's history of

peacefully attending anti-vaccine/mandate rallies. The tweet emphasizes non-violence and calls for resolving tensions with reason, not violence.

The discourse participants represent a diverse array of sources, each adding unique perspectives to the discourse surrounding anti-vaccine sentiments. The Huffington Post, a well-known news outlet, offers critical commentary on a North Dakota lawmaker's ironic situation at an anti-vaccine rally. NBC News, a prominent news network, reports on the death of Marcus Lamb, CEO of a Christian conservative network, from COVID-19, highlighting his anti-vaccine stance. Stuff, a New Zealand news outlet, covers the arrest of anti-vaccine mandate protesters, labeling them as "far-right" and "anti-vax." @PeterHotez shares insights about the risks associated with low vaccine uptake and rising anti-vaccine activism. Scorpio Secrets expresses frustration over Facebook's deletion of an anti-vaccine group, questioning the platform's authority. Rumble, a platform, shares a documentary portraying depopulation as a mass genocide and promotes alternative health solutions. Castanet.net, a news outlet, reports on an assault at an anti-mandate rally, emphasizing non-violence and advocating for reasoned resolution.

4.4 #PARENTS AGAINST VACCINES

Summary of Key Findings

January 2, 2024 - The Defender Children’s Health Defense

The post by Jane Beil discusses French researchers' identification of an "improbably high rate of deaths" in newborns linked to the rollout of the Beyfortus respiratory syncytial virus (RSV) shot. The narrative leans against vaccination, emphasizing safety concerns and lack of long-term studies on newborns.

January 15, 2024 - Patrick Murtagh

Patrick Murtagh shares a tragic incident after an 18-month MMR vaccine, alleging misdiagnosis by doctors and attributing death to a chronic viral illness. The post reflects distrust in the medical system and criticizes doctors for negligence.

January 19, 2024 - The HighWire

Jeohn Beaudonin shares data on blood and circulatory-related deaths linked to COVID-19 vaccines. The post, leaning against vaccination, suggests a surge in vaccine-related deaths, potentially due to fraudulent coding on death certificates.

January 20, 2024 - The Gateway Pundit

The post reports the sudden death of Mike Dickson (vaccinated) and uses irony to criticize his death and vaccination status. It carries a conservative bias, referencing Novak

Djokovic's vaccination stance and critical articles by Dickson, suggesting his vaccination status did not keep him from dying of COVID-19.

January 26, 2024 - Jimmy Dore Show

The post discusses various perspectives on COVID litigation, vaccine mandates, and medical board challenges. The conversation reflects skepticism towards certain vaccine-related policies and a desire for legal intervention.

January 27, 2024 - Truth Press

The article reports the unexpected death of a news anchor, Amanda Hanson The individual who posted claims “Another sudden, unexplained death of a young, healthy person.” The post claims it's from vaccination but reports of her death do not.

January 29, 2024 - Jim Dandy

Jim Dandy criticizes the historical State Board of Health for attributing a typhoid fever outbreak to "viruses" rather than acknowledging sewage-polluted water. The post advocates for a change in contemporary health governance.

January 29, 2024 - Children's Health Defense

The article calls for a global moratorium on mRNA vaccines, questioning their safety based on a review of data from vaccine trials. It reflects a strong anti-vaccine stance, emphasizing concerns about serious post-injection injuries and potential government bias.

February 3, 2024 - VNN

Jane Beil shares a post critical of a contest in New Jersey schools where kids can win cash prizes for promoting vaccines. The post expresses concerns about manipulating children for pharmaceutical profit.

February 6, 2024 - MSN

Jean-Claude Matte shares a Florida Grand Jury COVID-19 Investigation Report contradicting CDC recommendations on masks and questions the effectiveness of lockdowns.

February 7, 2024 - YouTube

Dr. John Campbell's video claims vaccines are linked to "white blood clots" and discusses various perceived motives behind the global response to the COVID-19 pandemic.

Chapter 5: Content Analysis

5.1 Word Usage Over Time

Title: Unveiling Insights: The Evolution of Word Usage Over Time

The study of word usage over time provides a fascinating lens through which we can gain valuable insights into the dynamic nature of language, societal shifts, and evolving cultural trends. The patterns and transformations in how words are employed not only reflect linguistic evolution but also serve as a mirror reflecting the changing landscapes of human thought, behavior, and social structures.

Observing the evolution of word usage unveils the ever-changing nature of language. Words undergo semantic shifts, acquiring new meanings or shedding old ones. The ebb and flow of linguistic trends reflect not only the adaptability of language but also the influence of external factors such as technological advancements, globalization, and cultural exchange.

Word usage acts as a cultural barometer, offering glimpses into the prevailing norms, values, and societal attitudes of different eras. Shifts in language can signal societal transformations, shedding light on issues such as gender dynamics, inclusivity, and

evolving perspectives on race, religion, and identity. The words chosen to express ideas or describe phenomena encapsulate the zeitgeist of a particular time.

The impact of technological advancements on language is particularly evident when tracing word usage over time. The introduction of new technologies often spawns a lexicon unique to that era. Observing the adoption of terms related to innovations, inventions, or digital advancements provides a linguistic roadmap of technological progress and societal adaptation.

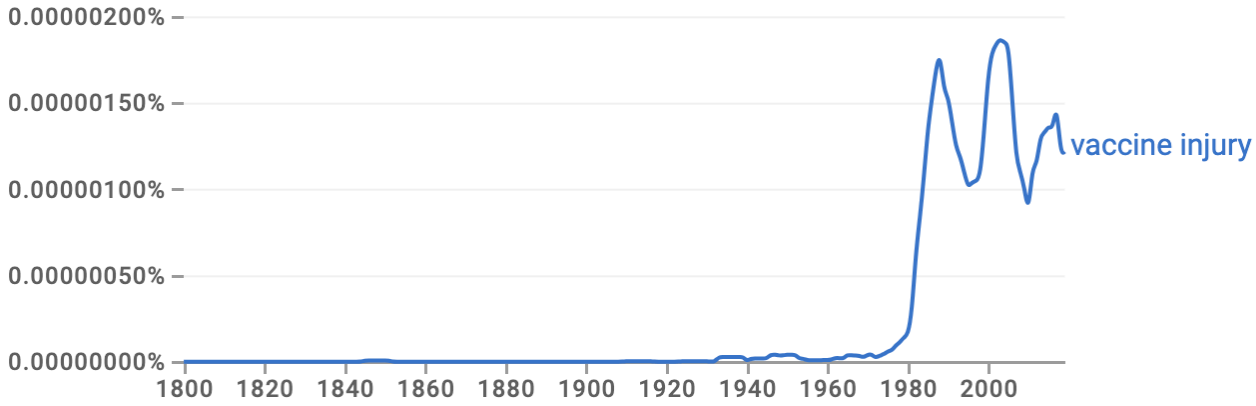
Word usage serves as an archive of social movements and ideological shifts. Examining changes in vocabulary can reveal the influence of political movements, activism, and advocacy on public discourse. Words associated with civil rights, environmentalism, or other societal changes become markers of historical moments and collective aspirations.

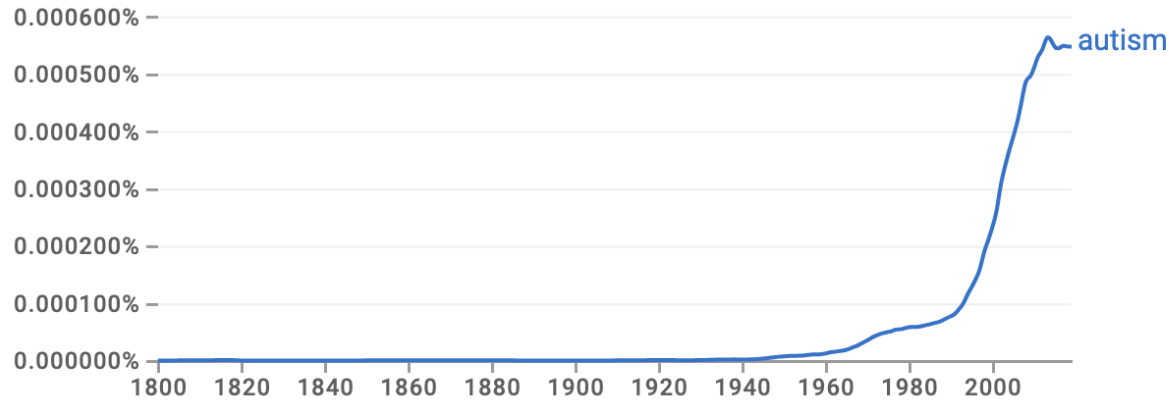
Analyzing word usage over time unveils power dynamics embedded in language. The evolution of terms related to authority, gender roles, or socio-economic status reflects societal structures and struggles for equality. Observing shifts in power-related language helps illuminate societal efforts to challenge or reinforce existing hierarchies.

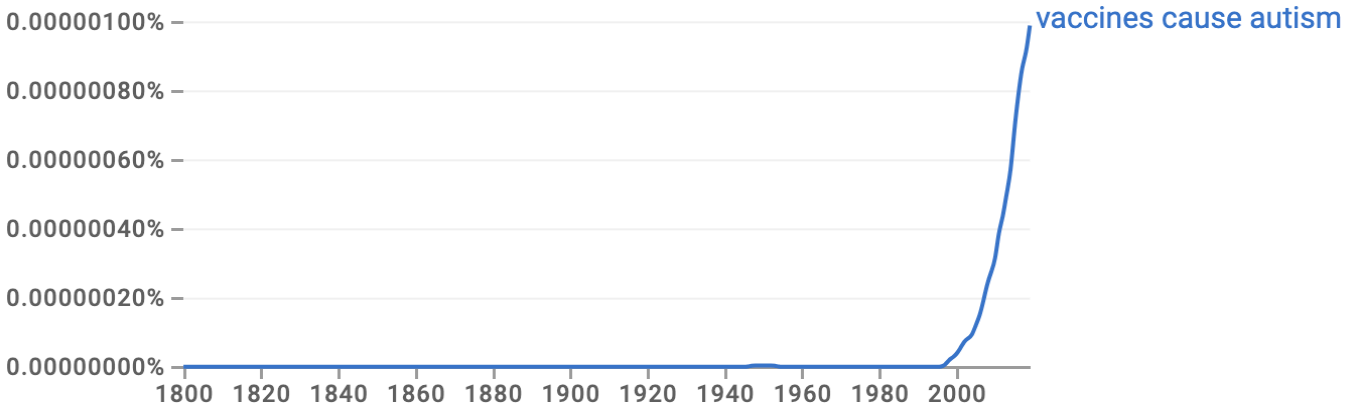
As societies become more interconnected, word usage becomes a fascinating study in globalization and cultural exchange. Borrowed words, known as loanwords or loan translations, often reflect cross-cultural interactions. The assimilation of terms from

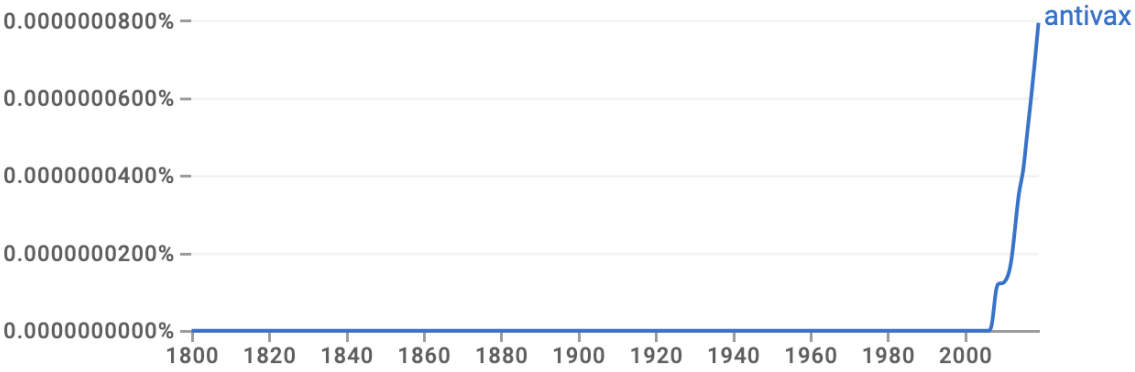
different languages not only enriches a language but also illustrates the interconnectedness of diverse societies.

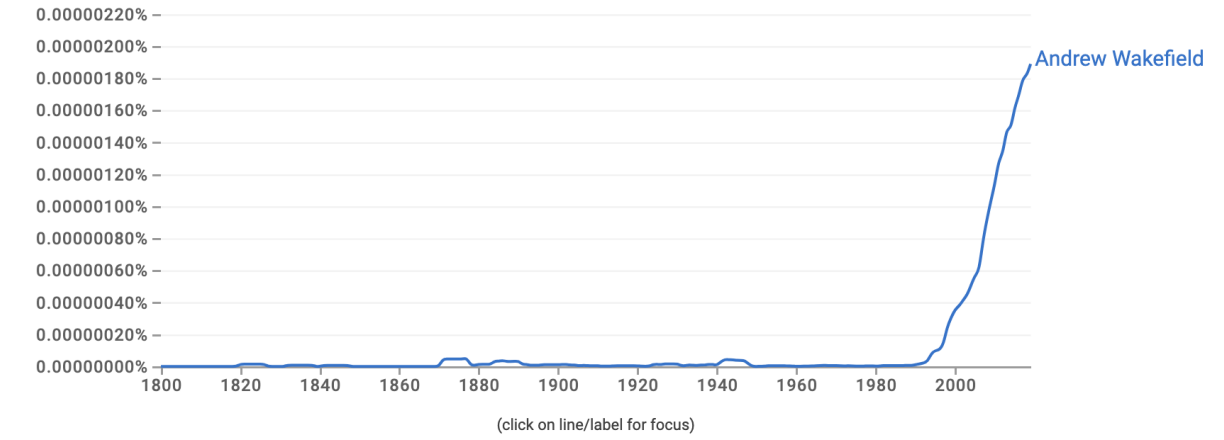
I have included several words or phrases that prompt individual consideration. While correlation does not mean causation between the use of two words, such as the growth of the word Facebook and the growth of the internet, others may merit a logical consideration for correlation, such as “Andrew Wakefield” and “vaccines cause autism”.


0.00000200%
0.00000150%
0.00000100%
0.00000050%
0.00000000%
1800
1820
1840
1860
1880
1900
1920
1940
1960
1980
2000
vaccine injury


0.000600%
0.000500%
0.000400%
0.000300%
0.000200%
0.000100%
0.000000%
1800
1820
1840
1860
1880
1900
1920
1940
1960
1980
2000
autism


vaccines cause autism
0.00000100%
0.00000080%
0.00000060%
0.00000040%
0.00000020%
0.00000000%
1800 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000


antivax
0.0000000800%
0.0000000600%
0.0000000400%
0.0000000200%
0.0000000000%
1800 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000


Andrew Wakefield
0.00000220%
0.00000200%
0.00000180%
0.00000160%
0.00000140%
0.00000120%
0.00000100%
0.00000080%
0.00000060%
0.00000040%
0.00000020%
0.00000000%
1800 1820 1840 1860 1880 1900 1920 1940 1960 1980 2000
(click on line/label for focus)

5.2 Personal Testimonies Analysis

One social media post begins with a personal narrative: "My adopted daughter had healthy twin boys who were developing well, hitting their milestones… normal happy boys. Then they had their MMR vaccines..." The post implies a connection between the MMR (Measles, Mumps, and Rubella) vaccines and a change in the developmental trajectory of the twins.

Emotionally, the post may evoke concern and empathy for the adoptive parent and the twins, as it suggests a significant change in the boys' well-being after receiving the MMR vaccines. Logically, the post relies on anecdotal evidence, lacking comprehensive information about the twins' overall health, potential confounding factors, or any established scientific link between MMR vaccines and adverse developmental outcomes.

The motivation behind posting about this experience could stem from genuine concern or a desire to share a personal story. The parent may believe that the MMR vaccines had a direct impact on the twins' development and could be sharing the story to raise awareness or seek support. The motivation might be driven by the perceived need to inform others about potential risks associated with vaccinations.

Logically, the post relies on anecdotal evidence, which, while emotionally impactful, is not sufficient to establish a causal link between MMR vaccines and developmental changes. The post doesn't consider other factors that might contribute to the observed changes in the twins. The logical fallacy here is the assumption of causation based on correlation without accounting for confounding variables, a common pitfall when evaluating vaccine-related anecdotes.

Within the community, responses can be diverse. Some individuals may empathize with the adoptive parent, acknowledging the emotional impact of such experiences. Others might question the validity of the causal link between MMR vaccines and developmental changes, recognizing the limitations of anecdotal evidence. It is essential for the community to approach such posts with critical thinking, understanding the importance of evidence-based information and recognizing the broader context of vaccination safety.

5.3 White Blood Clots

One social media post suggests a link between vaccines and "white blood clots" found by morticians, evoking emotional responses of fear and suspicion. Logically, the post lacks scientific evidence, leaving the term "white blood clots" unverified. The absence of sources raises questions about credibility, but personal testimony raises concerns that the post may be true.

The post may seek attention through sensationalism or align with anti-vaccine sentiments, using fear of growing white blood clots to shape public opinion.
The post employs fear without substantive evidence, introducing ambiguity around the involved vaccine. Community responses may vary, with some demanding evidence and others sharing based on emotion.

This post introduces a foreign fear of a medical penalty for becoming vaccinated. While this fear still exists, it may be difficult for parents to justify vaccination especially if they live in a place where they can avoid sickness more often.

5.4 Vaccines and Autism

The social media post, captioned "Healthy young child goes to doctor, gets pumped with massive shots of many vaccines, doesn't feel good and changes - AUTISM. Many such cases!" conveys the controversial perspective linking vaccines to autism. The post implies a cause-and-effect relationship between vaccination, adverse effects, and the development of autism in children.

Emotionally, the post elicits fear and concern by associating vaccines with a life-altering condition like autism. Parents, particularly those with young children, may resonate with the fear of unintended consequences for their child's health.

Logically, however, the post lacks empirical evidence to support the claimed link between vaccines and autism. However, by saying “many such cases” a theme of personal testimony is introduced

The motivation behind such a post can stem from various sources. Some individuals may genuinely believe in a vaccine-autism link due to anecdotal experiences. Others might intentionally spread this narrative to promote anti-vaccine sentiments, contributing to vaccine hesitancy.

The motivation for intentionally spreading antivaccine narratives without believing in it themselves does not seem prevalent. There is not a lot of evidence for motive. The post serves the purpose of either expressing genuine concern or furthering an agenda against vaccinations.

Logically, the post does fall victim to the fallacy of correlation implying causation. The temporal association between vaccination and the onset of symptoms does not establish a causal relationship. The use of the term "many such cases" lacks specificity and statistical support, further diminishing the post's logical credibility.

This post was written by Donald Trump, and therefore the post would be categorized as an “expert opinion” to those who believe in the post’s contents.
Within the community, diverse responses are expected. Some individuals may question the post, seeking evidence to support the claim and consulting reliable sources for information. Others might share the post based on personal beliefs or experiences, contributing to the perpetuation of the anti-vaccine narrative.

5.5 Scientific Reasoning for Vaccines Causing Autism

The social media post, captioned "Examining postmortem brains of ASD patients, researchers discover an accumulation of immune cells surrounding blood vessels in the brain..." introduces findings from a study on the brains of individuals with Autism Spectrum Disorder (ASD). The post implies a connection between immune cells and ASD, sparking interest and possibly influencing perceptions of the disorder.

Emotionally, the post may evoke curiosity and concern among individuals affected by or interested in ASD. The mention of examining postmortem brains and the discovery of immune cells can raise questions about the potential role of the immune system in ASD. Logically, the post does not explicitly establish causation between immune cell accumulation and the development of ASD. However, those who know children with autism or have children themselves may correlate these findings with their own children's sickness, allergies, etc. The findings may contribute to ongoing research but don't inherently explain the complex etiology of ASD. People may also use this knowledge to assert that the claims for vaccinations being “safe and effective” cannot be so because of immunization differences in children.

The motivation behind posting about this research may vary. On one hand, the post could serve as an informational update, sharing a breakthrough in ASD research. On the other hand, it might be intended to generate interest or concern by emphasizing a potential link

between immune cells and ASD. The motivations could range from scientific communication to raising public awareness. The research in this post could also be falsified, in which case the motivation would be to create confirmation in the minds of those who do not want to vaccinate their children.

Logically, the post is based on empirical findings from a research study. However, it is crucial to note that correlation does not imply causation. The accumulation of immune cells may be a consequence rather than a cause of ASD. Without further context, the post leaves room for misinterpretation, potentially leading to assuming a direct causal relationship between immune cell accumulation and ASD.

Within the community, diverse responses are anticipated. Some individuals may critically assess the post, recognizing the preliminary nature of the findings and the need for further research. Others might interpret the post as conclusive evidence of a link between immune cells and ASD, potentially influencing opinions on the disorder's origins.

In conclusion, this social media post presents intriguing research findings on immune cells in the brains of individuals with ASD. While the post is rooted in scientific inquiry, it is essential to approach it with a discerning eye, acknowledging the complexity of ASD's etiology. Understanding the motivations behind such posts and fostering a critical mindset within the community can contribute to informed discussions.

5.6 The Plandemic

Because our government as a whole advocates for vaccination, any notion to the contrary raises concern that the government is “lying” to the public. While most people with an eye for discernment can see that the government is made of individuals with diverse perspectives and upbringing it may be easy to question mainstream ideologies when presented with a convincing alternative. The Plandemic is that alternative.

The Plandemic trilogy, a series of films produced by Mikki Willis, revolves around Judy Mikovits, a figure known for her anti-vaccine activism. The trilogy comprises "Plandemic: The Hidden Agenda Behind Covid-19" (May 4, 2020), "Plandemic Indoctornation" (August 18, 2020), and "Plandemic 3: The Great Awakening" (June 3, 2023).

The initial video gained widespread attention for its unconventional perspective on the COVID-19 pandemic. Despite removal from various online platforms, it continued to circulate, fueling skepticism towards health protocols and contributing to public dissent.

Scientists and health professionals have condemned the trilogy for its claims and promotion of non-traditional speakers, notably Judy Mikovits.

The Plandemic has gone viral on many social media platforms and is often reposted on the pages I have studied. The trilogy's presentation style contributes to its conspiratorial nature, utilizing expert opinion, images of documents, and personal story techniques to shape audience perception.

In response to backlash, Willis expressed doubt about Mikovits' claims but remained supportive. "Plandemic Indoctornation" was positioned as a counter-response to critics, indicating a defensive posture.

The trilogy's impact underscores the significant role of social media in disseminating unconventional narratives. Online platforms facilitated its proliferation, impacting public perception and contributing to a broader resistance against health guidelines.
Upon the release of "Plandemic: The Hidden Agenda Behind Covid-19," Mikki Willis claimed interest from an independent producer with experience in HBO, Netflix, and Amazon projects. Despite Willis's assertion, investigations by the Los Angeles Times revealed no official interest from these major companies.

London Real, an online distributor, prominently featured "Plandemic: Indoctornation" on its Digital Freedom Platform, a site known for disseminating discredited COVID-19 theories. Founded and managed by Brian Rose, a podcast host, the platform has faced criticism for its promotion.

In the posts I have researched, Rumble has been the most shared platform for the Plandemic.

The advance promotion of "Plandemic: Indoctornation" allowed social media platforms like Facebook, Twitter, and YouTube to prepare for its release, in contrast to the unanticipated spread of the original video. These platforms implemented measures to curb the film's dissemination, including warnings, removals, and URL blacklisting. London Real reported 1.2 million views for "Plandemic: Indoctornation" on its first day, but the Digital Forensic Research Lab dismissed it as a "total flop" with limited social media engagement compared to the original video. Facebook emerged as the primary platform for exposure, while other platforms showed significantly lower engagement.

The strategic promotion and distribution approach for "Plandemic: Indoctornation" by London Real and Digital Freedom Platform facilitated its reach but encountered significant restrictions from major social media platforms. The disparity in viewership between platforms emphasizes the challenges of controlling the spread of controversial content, even with forewarning.

5.7 "Waging War on the Autistic Child: The Arizona 5 and the Legacy of Baron von Munchausen"

As the prevalence of autism spectrum disorders continues to rise, the landscape of controversies and revelations surrounding the condition becomes increasingly complex. In his investigation, Andrew J. Wakefield scrutinizes the recent trial case of the "Arizona 5," a family whose life was “shattered.” Accused of Münchausen syndrome by proxy, an unusual form of child abuse, the parents, responsible for five children on the autism spectrum, found themselves under relentless scrutiny from physicians, child protective services, and the legal system. Wakefield contends that the family faced an unjust onslaught, presenting overlooked evidence that could have exonerated them. The narrative shed light on the formidable challenges that families grappling with autism confront as they navigate the realms of diagnosis, treatment, and education.

Wakefield's exploration begins by addressing the escalating prevalence of autism spectrum disorders, emphasizing the urgency and gravity of the situation. The increasing number of diagnoses raises pertinent about the understanding, treatment, and societal response to autism. This sets the stage for a nuanced examination of the Arizona 5 case, revealing the intricacies and potential biases within the system.

The core of Wakefield's narrative revolves around the accusations of Münchausen syndrome by proxy leveled against the Arizona parents. This rare form of child abuse involves a caregiver fabricating or inducing illness in a child to gain attention or

sympathy. The stakes are heightened when the children in question are on the autism spectrum, amplifying the challenges faced by families already grappling with the complexities of the condition.

Wakefield asserts that the Arizona 5 faced a collective assault from medical professionals, child protective services, and the legal system. The allegation of fabricating medical symptoms in all five children placed an immense burden on the family. The author contends that the evidence supporting the parents' innocence was overlooked or dismissed, contributing to an unjust legal battle.

Wakefield claims that the story of the Arizona 5 extends beyond a singular case. It unveils a broader pattern of hardship and prejudice that families dealing with autism may endure. The complexities of autism, coupled with societal misconceptions and biases, create a challenging environment for affected families.

The narrative highlights the crucial role of accurate diagnosis, treatment, and education for families dealing with autism. In the Arizona 5 case, these elements were overshadowed by the specter of Münchausen syndrome by proxy, diverting attention from the genuine needs of the children and their parents.

"Waging War on the Autistic Child" also delves into the legacy of Baron von Munchausen, a character known for fantastical and exaggerated tales. Wakefield draws

parallels between the Arizona 5 case and the legacy of Munchausen, suggesting that the family became victims of a narrative spun out of control. This comparison adds a layer of cultural and historical context to the narrative, inviting readers to reflect on the power of narratives in shaping perceptions and influencing outcomes.

The narrative transcends the specific legal battle, shedding light on the broader societal issues and biases that compound the difficulties of navigating life on the autism spectrum. "Waging War on the Autistic Child" prompts readers to reconsider their perceptions of autism, advocating for empathy, understanding, and a more nuanced approach to supporting families affected by this complex condition.

The analysis of "Waging War on the Autistic Child: The Arizona 5 and the Legacy of Baron von Munchausen" aligns closely with the broader thesis on infant vaccination discourse amidst the increasing prevalence of autism spectrum disorders. The accusations of Münchausen syndrome by proxy represent a collective assault from medical professionals, child protective services, and the legal system, showcasing potential biases within the institutional framework.

Wakefield's exploration becomes a microcosm of larger societal issues and biases that compound the difficulties of life with autism. The overlooked evidence, as emphasized by Wakefield, resonates with the overarching theme of institutional distrust, shedding light on potential biases within the system affecting families dealing with autism. This

theme correlates with the examination of media representation in infant vaccination discourse, emphasizing the importance of understanding biases inherent in the discourse around autism.

5.8 Assessing Vaccine Efficacy Through Personal Narratives

The debate surrounding the efficacy of vaccines often centers on personal narratives that highlight instances of individuals taking or abstaining from vaccines and the subsequent outcomes of life or death. These anecdotes, while emotionally charged, can shape public opinion and influence individuals' decisions regarding vaccination.

Personal narratives wield significant influence in shaping public opinion, often carrying a potent emotional weight that resonates with individuals. When it comes to vaccines, stories of those who took a vaccine and experienced positive health outcomes, or conversely, those who abstained and suffered adverse effects, contribute to the broader discourse on vaccine efficacy. These narratives, shared through various platforms, impact public perception and fuel discussions around the benefits and risks associated with vaccination.

Anecdotal evidence, derived from personal narratives, has its own unique power. People are naturally drawn to stories that evoke emotions and connect on a personal level. In the context of vaccines, stories of individuals who attribute their well-being or the loss of a loved one to vaccination decisions can profoundly influence others. These anecdotes may

carry more weight than statistical data for some individuals, as they provide a relatable, human dimension to the debate.

Individuals often assert vaccine efficacy by pointing to cases where someone took a vaccine and experienced positive health outcomes. These narratives celebrate the role of vaccines in preventing illness, reducing severity, or even saving lives. Such stories serve as testimonials, reinforcing the belief in the effectiveness of vaccination. However, the opposite is absolutely true and often just as credible in the eyes of people looking for answers.

Conversely, instances where individuals chose not to take a vaccine and experienced positive health outcomes also contribute to the discourse. These narratives challenge the perceived necessity of vaccines in certain situations, suggesting that individual immune responses or lifestyle factors may play a significant role in health outcomes. While these anecdotes should be considered, they too must be viewed within the broader context of public health and the potential consequences of low vaccination rates.

The assertion that vaccines don't work can also stem from personal narratives of individuals who, after vaccination, experienced potential adverse effects leading to death. These stories amplify concerns about vaccine safety and contribute to vaccine hesitancy.

Chapter 6: Analysis of Media Discourse on Perceptions and Beliefs

6.2 Logical Reasoning and Logical Fallacies in the Face of Uncertainty

In analyzing community responses to media surrounding vaccine-related discussions, a prominent figure is @DrWakefield, whose content spans various platforms. Notable themes include the purported link between vaccines and autism, opposition to vaccine mandates, concerns about media portrayal, and condemnation of vaccines during pregnancy. One logical fallacy apparent in Dr. Wakefield's discourse is the reliance on belief-driven perspectives without robust scientific reasoning, as seen in the tweet correlating vaccines with autism in 2014. This aligns with a broader cultural context during Donald Trump's skepticism about vaccines, introducing a belief-driven narrative into public discourse.

The discourse surrounding #vaccinescauseautism involves diverse perspectives. While CNN maintains a neutral and health-focused stance, Fearless Parent manifests as an advocacy platform against vaccine coercion. Notably, Stop Mandatory Vaccination contributes to the anti-vaccination movement by attributing negative effects to the MMR vaccine.

In the #antivaccine discourse, The Huffington Post's ironic criticism of a North Dakota lawmaker's situation employs a fallacy of appeal to ridicule. The post lacks clear

justification for its pro-vaccination stance, relying on irony. Similarly, the post by NBC News criticizes the death of Marcus Lamb, emphasizing his anti-vaccine stance without providing a comprehensive argument in favor of vaccination. The discourse on anti-vaccine mandate protesters by Stuff introduces labels like "far-right" and "anti-vax," potentially appealing to emotion and undermining rational discussion.

In the PARENTS AGAINST VACCINES discourse, logical fallacies emerge in several posts. The Defender Children's Health Defense's post leans against vaccination by emphasizing safety concerns and lack of long-term studies, potentially invoking fear without substantial evidence. Patrick Murtagh's tragic incident after an 18-month MMR vaccine, although horribly sad, employs anecdotal evidence, criticizing doctors and reflecting a broader distrust in the medical system. The Gateway Pundit's post, again, introduces irony to criticize a vaccinated individual's death, intertwining it with unrelated conservative biases and implying a causal link without scientific basis.

The presence of logical fallacies, such as reliance on belief-driven perspectives, appeal to ridicule, and anecdotal evidence, in these discourses complicates the quest for truth. The use of such fallacies can manipulate emotions, hinder critical thinking, and contribute to the polarization of vaccine-related discussions. The outcome is a convoluted landscape of emotional jargon that, even if it eventually reveals truth, becomes incredibly challenging to decipher.

6.3 Analyzing Community Decision Making Processes

Vaccination has long been hailed as one of the most effective public health interventions, preventing the spread of infectious diseases and protecting individuals, particularly children, from severe health complications. Governmental agencies play a pivotal role in disseminating information about vaccine safety, efficacy, and necessity. Many people say that they don't trust the “government” but neglect to recognize that the government is a collaborative space with thousands of individuals. Those bureaucrats have individual motives, individual biases, hairstyles, and families. A critical eye would not argue that the government is out to get you, per say. However, other people argue that it is negligence, or perhaps an overarching desire for wealth and power that causes “the government” to become untrustworthy.

Many people place their trust in governmental agencies for several reasons. First, these agencies, such as the Centers for Disease Control and Prevention (CDC) and the World Health Organization (WHO), are staffed with experts in the field of immunology, epidemiology, and public health. These experts (individuals) have dedicated their careers to researching and understanding the benefits and risks associated with vaccines.

Second, governmental agencies are supposed to adhere to rigorous scientific processes when evaluating and approving vaccines. Vaccines undergo extensive testing in clinical trials, with results subjected to peer review before regulatory approval. The

transparent nature of these processes should foster confidence among the public, as it suggests a commitment to evidence-based decision-making.

Third, public health agencies often collaborate with international organizations and share information globally. This collaboration enhances the credibility of their recommendations, as they are based on a broad spectrum of research and data. Global cooperation also ensures that vaccines meet high safety and efficacy standards, promoting a unified approach to disease prevention.

Vaccine companies and the general public would hope for as many people to be vaccinated as possible. However, if the general public were to be told that vaccines are only 99% effective, and there will be less than a percent chance of autism or another side effect, very few people would confidently vaccinate their children.

Another factor contributing to vaccine hesitancy is the perceived influence of pharmaceutical companies on government agencies. Skeptics argue that financial interests may compromise the objectivity of vaccine recommendations, leading to suspicions about the true motives behind widespread immunization efforts.

Chapter 7: Conclusion

7.1 Summary of Findings

In this thesis, I did an exploratory study of what a person interested in antivax rhetoric might find on a simple search through major social media channels. I found that valid arguments (including valid premises and logical associations, not necessarily truthful conclusions) exist outside of the realm of traditional science, and that those viewpoints are cited in published academic journals, however, the sentiments shared in online platforms do not often use or cite those logical arguments. Instead, the arguments present on social media often include at least one logical fallacy, and often include some use of fear or sympathy.

Discourse analysis is an important area of study, especially concerning polarizing topics such as vaccination discourse. In the future, I would hope that not just "non-traditional" discourse would be analyzed but the traditional as well. For example, should someone choose to perform a discourse analysis on CDC publications, I think the results would be a worthwhile pursuit. For now, my research has found that both individuals and celebrities can have as big as a voice when posting on hashtag platforms.

Hashtag platforms are interesting in the fact that they can hold postings from any person despite credibility and repostings from credible and non credible sources with a varying amount of social following. For example, in one hashtag, posts from Donald Trump and

“tizzywoman” were shared next to each other. And, when combined with a title like “Parents Against Vaccines” or “#vaccinescauseautism” the credibility or popularity of those posts are bolstered with posts that did nothing to “deserve” such popularity other than posting on a hashtag.

Employing a case-study methodology provides a comprehensive exploration of the information landscape, offering insights into the various sources, narratives, and arguments individuals may encounter online. The case study method is extremely important, I believe, because the individual media consumer is *never* provided with a fully represented sample, and, when forming an opinion, it is not always the case the people are continually developing their opinions over hundreds or thousands of searches. It is often the case that one search “session” or even one conversation is enough to cause a parent to make a choice about which stance they will take.

One outcome of this analysis is an encouragement to actively listen to voices often marginalized as "conspiracy theorists." The goal is not to prove them right or wrong but to cultivate an environment where diverse viewpoints contribute to a deeper understanding of how people in our community perceive and process information. If it is the case that an opinion is formed on a single social media session, it would be illogical to assume that these people are “without help” “unable to be reasoned with” “or stuck in their ways”. These accusations are often the result of an emotional discussion, which the conversation on vaccination most certainly is.

This research has found a dilemma of vaccination that exists within a parameter of who's "life matters more." Many anti-vax self-proclaimed-conspiracy-theorists will admit that vaccines have helped to limit disease, but a common theme of distrust permeates when individuals speak up against proposed vaccine injury.

7.2 Implications, Recommendations, Interventions, and Strategies.

There is a pressing need for policy initiatives that promote transparency, openness, and inclusivity in vaccination communication strategies. Engaging with vaccine skeptics openly and addressing their concerns will help build trust and credibility in public health messaging. Censorship, hate messaging, and dismissal in general seems to promote the most common reason that people are vaccine hesitant, which is governmental distrust. Policymakers should prioritize the inclusion of diverse voices, including those often marginalized as "conspiracy theorists," in discussions about vaccination policy and implementation. The use of the word misinformation, while prevalent in online circles, may encourage echo chambers to become fueled by a desire to be heard for their opinions and beliefs, rather than a desire to seek credible and logical answers to their concerns. If each concern were to be met with definitive proof, such as freedom of information acts and scientific data communicated in an accessible way, I hypothesize that we would see much more progress, and less polarization in vaccination policy. While this process

inherently takes more time, it is a necessary evil to curbing vaccine aggression and polarization.

In terms of recommendations, policymakers should consider implementing targeted interventions that address the underlying anxieties and concerns of vaccine-hesitant individuals while lessening the pressure to vaccinate, including threats of mandatory vaccination. Consider the necessity of this recommendation after reading the closing remarks.

7.3 Limitations and Future Research

This discourse analysis has overviewed a few sample ideas that people have shared online through social media platforms. That being said, the discourse collected was from a single social media "session" and included a limited number of posts. The sample is not representative of the population and the timeline is not consistent as far as when posts were released. The reason for and significance of these limitations are done intentionally to discover what a real searching session might entail and to maintain authenticity to the searcher. However, the discourse analysis should not be used to make any format assertions on vaccine truths, but rather to find commonalities in the anti-vax community.

While prior studies have explored vaccine hesitancy and media representation, the unique context of the global pandemic presents an opportune moment to analyze shifts in narratives and public perceptions surrounding infant vaccination. In the future, it would

be helpful to have a larger representative sample of posts from before and after the Covid-19 pandemic. It was interesting to note that while many posts were from the months preceding the search session, there was a large sample from the year 2014 without current explanation. Another project on search results and political viewpoints is certainly called for.

The literature reviewed lay a foundation for understanding the psychological, sociocultural, and political dimensions of vaccination discourse, highlighting the importance of media framing and influential voices in shaping public opinion into the post-COVID-19 world. In the future it would be interesting to focus solely on public figures and their contribution to the conversation. Figures such as Angela Merkel and Barack Obama have endorsed vaccination campaigns, reinforcing the message of vaccine acceptance and science-based decision-making. Celebrities like Oprah Winfrey and Elon Musk have leveraged their media presence. Additionally, figures like Pope Francis and Greta Thunberg have argued for the moral imperative of vaccination in addressing global health challenges

In contrast, there are certainly public figures whose stances against vaccination carry significant weight, influencing public perception and shaping policy debates. Andrew Wakefield's study and Robert F. Kennedy Jr.'s activism highlight potential risks linked to vaccines, particularly regarding autism, a view held by many in the anti-vaccine community. Jenny McCarthy's personal journey with her son's autism diagnosis fuels her

skepticism, while Dr. Bob Sears and Sherri Tenpenny challenge mainstream vaccination practices, questioning their necessity and safety. Joseph Mercola and Del Bigtree advocate for natural health alternatives, questioning the scientific consensus on vaccine efficacy. Barbara Loe Fisher and Larry Cook champion vaccine choice, emphasizing individual rights and autonomy in medical decisions. Jim Carrey's focus on thimerosal raises concerns about vaccine ingredients and their potential health impacts.

While these explorations were not yet considered, this research does aim to extend existing frameworks by incorporating cultural analysis and using artificial intelligence. By dissecting the linguistic nuances within media discourse, the study endeavored to uncover implicit biases, framing techniques, and the overall tone of messages, offering a deeper understanding of the dimensions at play.

Unraveling the diverse perspectives on vaccine-related decisions necessitates an understanding of the psychological foundations of media influence. While investigating the overall opinions and psychological impacts linked to social media would be a commendable research avenue, this thesis is constrained by several factors. Psychoanalysis remains unfeasible, given the inability to engage with individuals in real-time. Additionally, resource limitations hinder our ability to discern the most prevalent and widely shared posts within online communities. This research adopts a case-study format with the aim of comprehending the information parents may encounter before making vaccination-related decisions.

7.4 Closing Remarks

Recently,, I was introduced to a self-proclaimed “conspiracy theorist”. They wore a shirt with a depiction of a person in a hazmat suit pushing a grocery cart. The caption read *“these are the people calling you conspiracy theorists”*. He was charming and loud-spoken and deeply passionate about his theories. I was in a conversation about a move that I will be taking to north Texas at the end of next month. My mother, who is also a self-proclaimed conspiracy theorist, was sitting at the table with us. After hearing that I would be moving, he noted that I should be *“careful of the fires”*. My mother, worried, inquired as to if they were forest fires due to the climate. *“No! There's all sorts of reasons for these fires. Someone is seeking insurance money, so they burn down fields of cows… Or, someone doesn't like neighbor Larry, and lights up his cows.”* My mother looked at me with concern. The air in the room thickened, and we all felt the weight of my future as a burnt-to-a-crisp north-Texan.

What has happened between the time we sat down at the table and mourned my prospective death? Fear, it seems, was the main actor. In the screwtape letters, C.S. Lewis introduces Wormwood, a devil that is assigned to cause problems in the life of the main character, or, the patient. These problems often present themselves as temptations or even distractions from the good available. I do not claim that Wormwood was present at the table with us, that would be dishonoring to the man who warned me about North Texas fires. But, perhaps something akin is spreading in the hearts of people in our country, causing people to worry about things that are outside of their control.

We all must go through our own analytical processes to discover truth. Another self-proclaimed conspiracy theorist once told me,

"I hate the word misinformation. It's just other people's way of telling you that they don't like the information that you shared."

It's understandable how this quote may anger some die-hard researchers. People who are desperately seeking the hard-cold-truth don't often want to be told that their scientific methods are not convincing enough. It seems a bit oxymoronic to suggest that those who have garnered authority to speak on certain topics are the same people that we should be wary of conspiracy. But, this seems to be the argument that many many people are making. Thus, to them, what might be called "*misinformation"* by the majority has the possibility of being truth if presented with enough evidence.

Given those constraints, many people would roll their eyes at the previous quote and not reach much further.

However, the sentiment behind what they had said to me seemed to be a desire for independent inquiry, and a disappointment in the abrupt touting of "misinformation" when someone shares their ideas along some ideation of that inquiry process. There is a strong element of freedom and independence in the process of finding out what we

believe. It can be very difficult to realize our full potential in forming our own opinions when we exist in any echochamber, whether it be family members, friends, or social media platforms of similar views.

In a culture where we praise activism and uncover the truth, it often may feel empowering to question the “narrative” because we have had so much success in the past century in questioning the status quo. Some people are concerned that the government exists in the same echochamber that we humans can fall into.

One example of this echochamber effect was often used in my university research classes. The Tuskegee Syphilis Study, conducted between 1932 and 1972, involved 600 African American men, 399 of whom had syphilis, while 201 did not. The study, conducted in Macon County, Alabama, aimed to observe the natural progression of syphilis. However, the study was deeply unethical, as participants were not provided with informed consent, and they were actively denied treatment for their syphilis even after penicillin became a widely accepted and effective cure. The deceptive practices targeted African American men, and the men were widely under the impression that they were taking an active role in their health and wellbeing. The study's echo chamber effect emerged from the isolation of information within the research team, fostering confirmation bias and the lack of external oversight.

I believe that everyone should recognize that the people who are ridiculed and dismissed as conspiracy theorists are often our friends and family members who are earnestly wanting to protect their families from these organizational tragedies.

When you reduce a person to a label such as conspiracy theorist, or sheep, you dehumanize them. There are certainly people who have been led astray by a harmful "narrative". Absolutely there are skeptics who cause unnecessary fear and distrust among our community. But they are more than conspiracy theorists or sheep; they are people.

These labels hinder the natural process of communal deliberation. It breaks friendships, interrupts communication, and halts the flow of *information,* true or false.

The twenty-first century has brought up questions of censorship of *misinformation* for the *greater good* of the community. James Madison has warned us of the consequences of these developments. In Federalist Paper No. 10. Madison wrote:

"Liberty is to faction what air is to fire, an aliment without which it instantly expires. But it could not be less folly to abolish liberty, which is essential to political life, because it nourishes faction, than it would be to wish the annihilation of air, which is essential to animal life, because it imparts to fire its destructive agency.

As long as the reason of man continues fallible, and he is at liberty to exercise it, different opinions will be formed. As long as the connection subsists between his reason and his self-love, his opinions and his passions will have a reciprocal influence on each other; and the former will be objects to which the latter will attach themselves."

Madison's argument is that liberty allows for the existence of factions, and rather than trying to eliminate factions, which would require removing liberty, the better approach is to have a system that can manage and control the effects of factionalism. The open flow of opinions and the clash of different ideas, according to Madison, prevents any one faction from dominating and promotes a balance that benefits the overall well-being of the society.

Hence, when we find ourselves in a position to articulate a sincere perspective that diverges from the prevailing majority, even if it is complicated, even if it is emotional, it becomes our responsibility to do so. In the same breath, we bear the duty to engage in thorough research and remain open to the viewpoints of others. As Einstein aptly noted,

"Man must cease attributing his problems to his environment and learn again to exercise his will – his personal responsibility in the realm of faith and morals."

This study serves as a testament to the intellectual process of actively listening to voices that are often disregarded or silenced. It underscores the importance of engaging with

perspectives that may diverge vehemently from the mainstream narrative. By embracing dissenting viewpoints, we uphold the principles of open dialogue and inclusivity, recognizing that every voice has value and contributes to a richer understanding of complex issues. In doing so, we honor the duty to acknowledge the nuances and complexities inherent in any discourse. This commitment to genuine dialogue fosters an environment where diverse perspectives can coexist.

In the ongoing debate surrounding vaccination, it's easy to perceive vaccine proponents and anti-vaccine advocates as diametrically opposed, with seemingly irreconcilable differences. However, a closer examination reveals that these two groups share more similarities than they might realize. Despite their divergent views on vaccination, both sides often have earnest and good intentions rooted in their shared values and concerns.

Both vaccine proponents and anti-vaccine advocates prioritize the health and well-being of their communities. Whether advocating for widespread vaccination to prevent the spread of infectious diseases or raising concerns about vaccine safety, both groups ultimately seek to promote the health and vitality of society as a whole. This common desire for a vibrant and healthy community underscores a shared commitment to public health, albeit through different approaches.

Both sides share a genuine concern for the well-being of children. Vaccine proponents advocate for vaccination as a means to protect children from potentially life-threatening

diseases, while anti-vaccine advocates often voice concerns about the safety and long-term effects of vaccines on children's health. Despite these differences in perspective, the underlying motivation stems from a shared desire to safeguard the health and future of the younger generation.

Furthermore, both vaccine proponents and anti-vaccine advocates emphasize the importance of informed decision-making. While they may disagree on the sources and interpretation of information regarding vaccines, both groups recognize the significance of individuals having access to accurate and comprehensive information to make informed choices about their health. This mutual emphasis on informed decision-making reflects a commitment to autonomy and empowerment within healthcare decision-making processes.

Additionally, both sides call for transparency and accountability within the healthcare system. Vaccine proponents advocate for transparency in vaccine development and testing processes to ensure safety and efficacy, while anti-vaccine advocates seek greater transparency regarding potential risks and adverse reactions associated with vaccines. This shared desire for openness and accountability reflects a common commitment to upholding ethical standards and promoting trust within the healthcare community.

Despite their differences, vaccine proponents and anti-vaccine advocates are more similar than they often acknowledge. Both groups share fundamental values and concerns related

to community health, children's well-being, informed decision-making, and transparency within the healthcare system. Recognizing these shared similarities can foster constructive dialogue and mutual understanding, ultimately leading to more effective public health initiatives that prioritize the common good. By acknowledging each other's earnest intentions and finding common ground, both sides may work together towards the shared goal of promoting health and well-being for all.

Works Cited

Çelik, Taylan, and B. U. K. E. T. Başaran Tarhan. "Trust, distrust and skepticism: Parent's perspective on COVID-19 prevention and vaccination in children aged 0-5 years." *Trends in Pediatrics* 4.2 (2023).

Blume, Stuart. "Anti-vaccination movements and their interpretations." *Social science & medicine* 62.3 (2006): 628-642.

Harrison, Emily A., and Julia W. Wu. "Vaccine confidence in the time of COVID-19." *European journal of epidemiology* 35.4 (2020): 325-330.

Van Nguyen, Duy, and Phi-Hung Nguyen. "Social media and COVID-19 vaccination hesitancy: mediating role of the COVID-19 vaccine perception." *Heliyon* 8.9 (2022).

Holton, Avery, et al. "The blame frame: Media attribution of culpability about the MMR–autism vaccination scare." *Health communication* 27.7 (2012): 690-701.

Wakefield, Andrew et al. "Ileal-lymphoid-nodular hyperplasia, non-specific colitis, and pervasive developmental disorder in children." The Lancet, vol. 351, no. 9103, 1998, pp. 637-641.

Gabis, Lidia V., et al. "The myth of vaccination and autism spectrum." *European Journal of Paediatric Neurology* 36 (2022): 151-158.

Chen, W., et al. "No evidence for links between autism, MMR and measles virus." *Psychological medicine* 34.3 (2004): 543-553.

Coulter, Harris Livermore, and Barbara Loe Fisher. *A shot in the dark: why the P in the DPT vaccination may be hazardous to your child's health*. Penguin, 1991.

Habakus, Louise Kuo, Mary Holland, and Kim Mack Rosenberg, eds. *Vaccine epidemic: how corporate greed, biased science, and coercive government threaten our human rights, our health, and our children*. Simon and Schuster, 2011.

Paterick, Zachary R., et al. "The challenges to transparency in reporting medical errors." *Journal of Patient Safety* 5.4 (2009): 205-209.

APA Geier, D. A., et al. "A comprehensive review of mercury provoked autism." *Indian Journal of Medical Research* 128.4 (2008): 383-411.

Geier, D. A., et al. "A comprehensive review of mercury provoked autism." *Indian Journal of Medical Research* 128.4 (2008): 383-411.

Cissel, Margaret. "Media Framing: a comparative content analysis on mainstream and alternative news coverage of Occupy Wall Street." *The Elon Journal of Undergraduate Research in Communications* 3.1 (2012): 67-77.

Romer, Daniel, Kathleen Hall Jamieson, and Sean Aday. "Television news and the cultivation of fear of crime." *Journal of communication* 53.1 (2003): 88-104.

Bernstein, Justin. "Anti-vaxxers, anti-anti-vaxxers, fairness, and anger." *Kennedy Institute of Ethics Journal* 31.1 (2021): 17-52.

Bernstein, Justin. "Anti-vaxxers, anti-anti-vaxxers, fairness, and anger." *Kennedy Institute of Ethics Journal* 31.1 (2021): 17-52.

An, Seon-Kyoung, and Karla K. Gower. "How do the news media frame crises? A content analysis of crisis news coverage." *Public relations review* 35.2 (2009): 107-112.

Ladd, Jonathan McDonald. "The neglected power of elite opinion leadership to produce antipathy toward the news media: Evidence from a survey experiment." *Political Behavior* 32 (2010): 29-50.

Edley, Nigel, and Lia Litosseliti. "Critical perspectives on using interviews and focus groups." *Research methods in linguistics* (2018): 195-225.

Kwak, Haewoon, et al. "What is Twitter, a social network or a news media?." *Proceedings of the 19th international conference on World wide web*. 2010.

Biography

Dava McDaniel was born in Austin, Texas and went to Highschool in San Marcos Texas. She spent the school year in the city, and traveled to the country to spend the summers at Charis Hills summer camp, a place for children with autism. Spending each summer with her grandparents at the summer camp, she developed a deep appreciation for inclusivity and empathy. In 2020, Dava began her studies at the University of Texas at Austin, majoring in Plan II Honors and Government, with a minor in business. Over the summer, she interacted with parents of varied views on vaccination. Graduating in May 2024, Dava carries with her a commitment to advocacy and empathy as she continues to work as the Director of Administration for Charis Hills.